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ABSTRACT

This document examines societal influences that promote the continued use of drugs, considering how "mixed messages" are sent to U.S. youth regarding the acceptable use of alcohol and other drugs (AOD). It analyzes public and private sector policies, practices, and regulatory initiatives aimed at reducing and eliminating alcohol and other drug problems. An introduction by Robert L. DuPont desribes the history of environmental approaches to the prevention of alcohol and other drug use. "Illicit Drug, Tobacco, and Alcohol Use Among Youth: Trends and Promising Approaches in Prevention" (Lawrence Wallack and Kitty Corbett) reviews the recent history of AOD abuse prevention efforts and concludes that a broad-based, comprehensive approach is needed. "On Drugs and Mass Media in America's Consumer Society" (Todd Gitlin) argues that drug use is a predictable consequence of U.S. culture's emphasis on consumerism and immediate gratification. "Stories That Hurt: Tobacco, Alcohol, and Other Drugs in the Mass Media" (George Gerbner) summarizes research on the interrelation of drugs and the mass media and offers insights into the conflicts underlying mass media messages about drugs. "Drug Availability in a Public Health Perspective" (James F. Mosher) focuses on the availability of alcohol, tobacco, and marijuana, contending that new regulatory and legal policies should be considered that address all levels of drug availability. The document concludes with an epilogue, "Creating Drug-Free Environments: Beyond and Back to the Ihdividual" by Raymond P. Lorion. (NB)

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OSAP Prevention Monograph–6

YOUTH AND DRUGS: SOCIETY'S MIXED MESSAGES

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Foreword

This volume, the sixth in a series of prevention monographs of the Office for Substance Abuse Prevention, examines past and present societal influences that have fostered the continued use of licit and illicit drugs by Americans from virtually every walk of life. The volume presents the analyses and viewpoints of prevention and communications experts on how "mixed messages" are often sent to American youth regarding acceptable use of alcohol and other drugs. It analyzes public and private sector policies, practices, and regulatory initiatives aimed at reducing and eliminating alcohol and other drug problems.

In so doing, this volume attempts to provide balance to the public health model of agent, host, and environment by targeting the environment. Most prevention strategies have been aimed at informing, educating, and innoculating the host or individual or reducing the availability of the agent or drug itself. Fewer have endeavored to modify the social environment and social norms. I believe that such efforts are one of the more promising areas for future prevention research and study. The information provided by this monograph may also lend itself to advancing opportunities for forming community partnerships, which I believe are essential for addressing such complex issues.

This monograph continues to illustrate our commitment to the informed discussion of these critical issues facing us today. We hope that the knowledge contained within will stimulate new ideas and further efforts to seek solutions in preventing the use of harmful drugs by all Americans.

Elaine M. Johnson, Ph.D., Director
Office for Substance Abuse Prevention

Preface

When the Office for Substance Abuse Prevention (OSAP) was created by Federal legislation in 1986, an important part of the office's mission was to provide leadership in developing comprehensive strategies for dealing with alcohol and other drug (AOD) problems. The concept of comprehensiveness has been central to OSAP's work since its inception.

What is meant by "comprehensive"? To be comprehensive, prevention strategies need to encompass the whole community, not just one segment of the community. They need to focus on collaborative relationships among community leaders, organizations, and institutions, establishing community norms of nonuse as the ideal.

Comprehensiveness also means taking into account the complex etiology of AOD use—recognizing the individual, family, peer group, and community factors that contribute to the problem and addressing a variety of these factors, not just one or two in isolation. OSAP's mission also includes a special emphasis on those individuals and groups in the community at highest risk.

This monograph examines what has often been a missing piece of the puzzle: the broader social and cultural environment in which prevention programs are conceptualized and developed. Roland Warren, a sociologist at Brandeis University, has helped to clarify our thinking about the environment by describing what he terms "horizontal" and "vertical" communities. The horizontal community is what we normally think of when the idea of community comes to mind. It is the community beyond the immediate family in which people are influenced by individuals, groups, norms, and values that are physically proximate—friends, neighbors, townspeople, and so on. The vertical community is one in which norms and values are established and communicated by individuals, groups, and organizations that are far away.

Modern society is characterized increasingly by vertical communities. In establishing norms and values in the vertical community, the mass media and social policy (the focus of this book) play a pivotal role.

The implications for the field of alcohol and other drug prevention are numerous. It is clear, for example, that the values and norms of the vertical community have contributed to the recent widespread decline of some forms of drug use and the growing awareness of the harmful effects of drugs as well as related changes in attitudes toward drug use. These changes have reached every corner of our society, and the vertical community—in particular the interrelationship of social policy and the norms regarding drug use conveyed by the mass media—has been an important element in these changes. Nevertheless, as the authors make clear throughout this book, the vertical community is hardly of a single mind about the issue of AOD abuse. The messages are mixed,

and we are still far from having achieved a clear consensus about the problem and how to address it.

This monograph was designed to open up new areas for discussion in alcohol and other drug prevention. The intended audience is broad; it consists of policymakers, professionals in the field, and informed lay citizens. Its purpose is to stimulate thinking about how we can look at ways to have an impact on both the vertical and horizontal communities in working toward the goal of achieving an even stronger consensus about how to deal with AOD problems. The book is a challenge to expand our vision of the problem and its context and thereby to begin to develop more creative and truly comprehensive solutions.

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Introduction

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For the first time in nearly 20 years, since the modern drug abuse epidemic began, new ideas about drug abuse prevention are being widely discussed. This book focuses on one of the most important: environmental approaches to prevention.

To understand the contribution of this book it is helpful to look back over the American experience with environmental approaches, focusing mainly on efforts to control the availability of alcohol and other drugs (AOD), throughout the 20th century. As the 19th century ended there was a rapidly growing reaction to the devastating use of both alcohol and relatively newer mind-altering chemicals, including cocaine and heroin. After the synthesis of heroin in 1898, it had been sold over the counter as a soothing syrup for crying babies. Cocaine had been, until 1903, an ingredient of Coca-Cola, then sold as a health product.

The leading forces in the antidrug movement of the early 20th century were religious organizations and a political reform movement known as populism. In rapid succession national laws were enacted to protect Americans from AODs. The Pure Food and Drug Act of 1906 forbade the use of certain drugs in patent medicines. The Harrison Narcotics Act of 1914 prohibited the use of narcotics except under strict medical control. The cycle of reform was completed with the prohibition of the manufacture and sale of alcoholic beverages in 1917.

Prohibition of alcohol was one of the least understood and most important episodes in American drug abuse history. Despite the clear evidence of reduced drinking and related problems that ensued, Prohibition came to be seen as a mistake that imposed moral values on the populace, reduced individual freedoms, and spawned organized crime. The repeal of Prohibition reflected a dramatic reversal in the country's political climate and the clear separation of alcohol from other drugs.

After repeal, drinking became fashionable and abstinence almost incomprehensible to all but religious fundamentalists and recovering alcoholics. During the next two decades, as the memory of Prohibition faded, there was no serious discussion of extending repeal to illegal drugs like heroin and cocaine. In 1937, to underscore this point, marijuana was added to the list of prohibited narcotics. When the country experienced a modest but frightening upsurge of heroin addiction in the early 1950s, the response was tougher law enforcement

focused on both the drug seller and user. Long prison sentences were virtually the only method used to control this miniepidemic.

In the mid-1960s—the beginning of the modern drug abuse epidemic—prohibition was applied without controversy to illegal drugs such as cocaine, heroin, and marijuana while public attitudes toward the use of alcohol remained essentially permissive. Then, as rebellion and widespread drug use intensified in the youth culture, the older generation's double standard for alcohol and illegal drugs was called into question. For the first time some segments of society began to debate the wisdom of prohibiting use of the illegal drugs, marijuana in particular. As the epidemic of drug use grew during the early 1970s, including large and troubling increases in drug use by youth, the 40–year–old national consensus permitting alcohol use but prohibiting other drug use disintegrated.

The drinking age was lowered in the early 1970s to 18 from 21, which had been the established drinking age since 1933. The drug user was separated from the seller by legal sanctions reserved for the seller. The attitude prevailed increasingly that most users of illegal drugs were healthy young people who used drugs to relax and have fun, just the way their parents used alcohol. In those cases of a few troubled people who could not handle drugs and lost control of their drug use, those persons were considered sick, not criminal, and they needed treatment, not punishment. This new attitude equating illicit drug use with alcohol use peaked in the national movement to decriminalize—or even to legalize—marijuana, the most widely used illicit drug. Both reflecting and promoting the tolerance for illicit drug use, use of alcohol and illicit drugs dramatically increased in the early 1970s.

The late 1970s saw the first stages of a new antidrug movement that rapidly took hold. Initially it focused on the role of parents in helping their children to grow up drug free. Problems associated with alcohol-impaired driving were also a focus. Soon the legal drinking age was increased throughout the country to 21. The problem of drug use in the workplace also became a concern, and drug testing came into widespread use although it was hotly debated.

As public discussion of ways to prevent AOD problems has intensified in recent years, some have called for a "more rational" policy toward illicit drugs, namely legalization of illicit drugs combined with tougher approaches to alcohol. Advocates of this view say that legalization of illicit drugs would take the profits out of the hands of organized crime and permit routine, nonpunitive forces of society to restrain drug-using behavior. They point to continuing problems in reducing the supply of illicit drugs, arguing that the demand for drugs will perpetuate the illicit drug trade indefinitely.

While discussions of these policy issues continue, it has become increasingly clear on both sides of the debate that more effective ways must be found to reduce the demand for drugs, including legal drugs such as alcohol and tobacco. Indeed

the mood of the Nation, as shown in the increasing prohibition of cigarette smoking in public places, is clearly moving in the direction of stronger prohibitions against the use of all chemical substances, both legal and illegal. Public attitudes, an important aspect of the environment surrounding licit and illicit drug use, are rapidly becoming more antidrug.

Changes in attitudes and environmental factors affecting alcohol use have been almost as significant as those related to cigarette smoking. Although there is still little enthusiasm for a return to full-scale prohibition of alcohol, restriction of alcohol advertising, legal penalties for serving alcohol to people who subsequently cause car crashes, warning labels on bottles containing alcoholic beverages, and a continuing decline in the popularity and social acceptability of drinking alcohol all signal important environmental shifts. These shifts are reflected in the first downward trends in alcohol use since repeal of Prohibition in 1933.

These new attitudes received a ringing endorsement from former U.S. Surgeon General C. Everett Koop. In his last major initiative before leaving office he proposed a tough and sweeping campaign to change the environment in which decisions are made to use or not to use alcohol. His proposal included reducing the legal blood-alcohol concentrations from 0.10 percent to 0.04 percent for adults and zero for youth under the age of 21; higher taxes on alcoholic beverages; and restrictions on advertising of alcoholic beverages, especially marketing alcohol to youth. In making these proposals, Dr. Koop clearly focused on environmental rather than individual factors, pointing the way to an important discussion of environmental factors among policymakers, community leaders, and professionals in the health and AOD fields.

This volume takes an important step toward informing and shaping that discussion. At a time of intense national concern about the drug problem, these essays focus attention on a variety of ways in which the social, cultural, and policy aspects of the environment both contribute to drug use and can be marshaled to reduce the demand for drugs. As the essays make clear, environmental approaches are a relatively new and unexplored dimension within a broad spectrum of prevention approaches. To date we have focused mainly on ways to restrict the supply of illicit drugs and change the behavior of individuals through educational interventions. Yet, as parent activists learned in the late 1970s and as the authors represented in this volume make clear, the environment surrounding AOD use must itself be a key consideration in prevention. It is clear that for the prevention field, environmental approaches are the next frontier.

CHAPTER 1

Illicit Drug, Tobacco, and Alcohol Use Among Youth: Trends and Promising Approaches in Prevention

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Introduction

To understand the importance of environmental approaches to the prevention of AOD problems, one must first grasp their historical and programmatic context. Lawrence Wallack and Kitty Corbett present a systematic review of the premises of prevention programming, beginning with the drug crisis of the 1960s and highlighting research over the past 20 years indicating that most strategies have had limited impact on the behavior of individuals. What is clearly needed, according to Wallack and Corbett, is a broader, more comprehensive, and multifaceted approach to prevention that takes a variety of societal and cultural factors into account while also focusing on environmental issues.

The increasing politicization of the drug issue—the "war on drugs" of recent years, the passage of the Omnibus Drug Abuse Act of 1986, and the current administration's stepped-up assault on drugs—has important implications for the prevention of alcohol, marijuana, tobacco, and other drug use by American youth.[1] On the positive side, it has increased public awareness of the issue and created an environment conducive to action. At the same time, it has generated an atmosphere of emergency exemplified by the ever-popular "war" metaphor. An atmosphere of emergency does not leave much room for the kind of reasoned discussion and planning that needs to take place. Nonetheless, widespread societal identification of drugs as contrary to health and general wellness may greatly facilitate the effectiveness of prevention strategies at this historical moment, compared to the impact of similar strategies employed only a decade or so ago.

Although public attention and awareness are keen, there has been a narrowing of focus and perception related to the drug problem. For example, tobacco and (to a lesser extent) alcohol, although they are much more widely used and associated with far greater damage than other drugs, tend to be ignored by the general public amid the hue and cry over illegal drugs. Complex social conditions and environmental factors that influence people (especially young people) to begin using drugs are often overlooked. Inquiry into the relationship between poverty and drug use is rare. This narrowing of focus could hamper rather than facilitate prevention efforts.

Overall, the current societal readiness to take action on major drug issues presents a significant opportunity. It is important in any field to be able to capitalize on positive trends, and certainly with regard to drug abuse. Attitudes in general have become less pro-use, rates of use have declined, and community-level initiatives and public policy interventions are growing in number and visibility. It is an appropriate time to review trends in prevention programming and look for promising new directions.

Trends in the Use of Alcohol, Tobacco, and Other Drugs

The Epidemiological Picture

One place to start in examining promising directions for the prevention of drug problems is the nature of drug use among youth today. Two major surveys currently provide national data on drug use among youth. Both are funded by the National Institute on Drug Abuse (NIDA), but only one, the "Monitoring the Future" study (also known as the High School Survey), focuses exclusively on youth and is repeated every year. The other, the National Household Survey, was last conducted in 1988.

The High School Survey is administered by University of Michigan researchers among a sample of approximately 16,000 high school seniors across the country. The 1988 survey, the most recent to be made public as of this writing, reported findings that were at the same time encouraging and a cause for concern. The encouraging news was that the prevalence of drug use among youth, especially the use of illegal drugs, moderated significantly over the past decade. This finding closely parallels the findings of the National Household Survey (National Institute on Drug Abuse 1989). On the other hand, the use of a variety of chemical substances remained at unacceptably high levels. One out of 5 high school seniors had used marijuana in the month prior to the survey, nearly 3 out of 10 had used cigarettes, and nearly two-thirds had consumed alcoholic beverages (Johnston et al. 1989).

The survey found that cigarettes were used daily (on 20 or more occasions in the past 30 days) by more of the respondents—18 percent—than any of the other drug classes. In fact, 10.6 percent said they smoked one-half pack or more per day. Daily alcohol use was reported by 4.2 percent of the high school seniors and daily marijuana use by 2.7 percent. Daily use of other drugs such as cocaine, inhalants, and sedatives appeared limited. Less than 0.5 percent of high school seniors reported daily use of any drug other than marijuana, alcohol, and tobacco. Nevertheless, noted the researchers, "while very low, these figures are not inconsequential, given that 1% of the high school class . . . represents roughly 26,000 individuals" (Johnston et al. 1988).

A much greater proportion of high school seniors reported having used various drugs at least once in the past month. Besides alcohol, marijuana, and cigarettes, drugs used in the past 30 days included stimulants (4.6 percent) and cocaine (3.4 percent). For the most part, the two legal drugs (tobacco and alcohol) were most likely to be used, and reported marijuana use far outpaced use of the other illegal drugs. Nevertheless, there had been a steady downtrend in marijuana use since 1978, when more than 37 percent had used it in the past 30 days (the 1988 figure was 18 percent).

An important development in recent surveys is a clear decline in the use of cocaine from a high in 1985 of 6.7 percent having used it in the past 30 days to the 1988 low of 3.4 percent. The High School Survey also found declines in the use of marijuana, stimulants, and barbiturates. Reports of any illicit drug use in one's lifetime have declined since 1983, and reports of use in the past year or the past 30 days have declined since 1980.

These declines—consistently reported across several recent national surveys—are impressive. They reveal an across-the-board downward trend in drug use, and they imply a major change in the climate of drug use for youth entering the high-risk teenage years.[2] Nevertheless, "despite the improvements in recent years," the authors noted in their 1988 report as follows:

> It is still true that this nation's high school students and other young adults show a level of involvement with illicit drugs which is greater than can be found in any other industrialized nation in the world. Even by historical standards in this country, these rates remain extremely high. Heavy drinking also is widespread and of public health concern; and certainly the continuing initiation of large proportions of young people to cigarette smoking is a matter of great public health concern (Johnston et al. 1988).

The trends in drug use by the young provide some basis for optimism but not for complacency. Levels of current use of illicit drugs are encouraging when viewed in the light of trends of the past 10 to 15 years; they make a troubling picture when juxtaposed against the degree of use nationwide before 1965.

Although illicit drug use has declined substantially in the past decade, there have been relatively modest declines for alcohol and cigarette use. Furthermore, the High School Survey includes only high school seniors; it does not attempt to document trends among school dropouts (estimated to be about 15 percent), a population that by definition is at high risk for AOD problems (Johnston et al. 1989). An ominous undercurrent of the High School Survey for many years has been the consistent finding that students who do not plan to continue their education in college have higher rates of drug use than the college bound. Another survey found smoking rates of more than 70 percent among high school dropouts (Pirie et al. 1988). The implications are clear—and disturbing—for those who are no longer in school at all.

Trends in Attitudes

The attitudes of high school seniors toward drug use mirror the current decline in prevalence. The 1987 High School Survey found that young people increasingly believed the use of illicit drugs, tobacco, and (to a lesser extent) alcohol is potentially harmful and disapproved of using them. Table 1 shows trends over the past 13 years in attitudes about the perceived harmfulness of using marijuana, alcohol, cigarettes, and other drugs. These data reveal some interesting findings and a few dramatic changes.

First, there was a high level of agreement that regular use of marijuana and cocaine pose a great risk to the user. From 1978 to 1987 the proportion of high school seniors perceiving a "great risk" in occasional or regular use of marijuana and cocaine more than doubled. The cocaine-related deaths of two well-known athletes in 1987 contributed to a much greater awareness of the dangers of the drug.

Second, perceptions of risk associated with heavier use of alcohol did not increase as dramatically. For example, although 7 out of 10 believed taking four or five drinks nearly every day is a great risk (the same proportion as for regular marijuana use), this proportion represents only a 14-percent increase in the past 10 years. Also, although the figure was up 25 percent in the past 7 years, only 41.9 percent said having five drinks once or twice each weekend is associated with great risk.

Third, despite the universal acceptance of the serious health risks of cigarette smoking, nearly one-third of the seniors did not perceive pack-a-day smoking as a great risk. This belief is a source of concern even though the perceived risk of smoking at least one pack of cigarettes per day has increased by more than 30 percent since 1975.

Table 1. Trends in harmfulness of drugs as perceived by seniors in the 1987 High School Survey

Q. How much do you think people risk harming themselves (physically or in other ways), if they . . .	Percentage saying "great risk"[a] Class of 1975	Class of 1976	Class of 1977	Class of 1978	Class of 1979	Class of 1980	Class of 1981	Class of 1982	Class of 1983	Class of 1984	Class of 1985	Class of 1986	Class of 1987	1986-87 change
Try marijuana once or twice	15.1	11.4	9.5	8.1	9.4	10.0	13.0	11.5	12.7	14.7	14.8	15.1	18.4	+3.**
Smoke marijuana occasionally	18.1	15.0	13.4	12.4	13.5	14.7	19.1	18.3	20.6	22.6	24.5	25.0	30.4	+5.4***
Smoke marijuana regularly	43.3	38.6	36.4	34.9	42.0	50.4	57.6	60.4	62.8	66.9	70.4	71.3	73.5	+2.2
Try LSD once or twice	49.4	45.7	43.2	42.7	41.6	43.9	45.5	44.9	44.7	45.4	43.5	42.0	44.9	+2.9
Take LSD regularly	81.4	80.8	79.1	81.1	82.4	83.0	83.5	83.5	83.2	83.8	82.9	82.6	83.8	+1.2
Try PCP once or twice	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	55.6	NA
Try cocaine once or twice	42.6	39.1	35.6	33.2	31.5	31.3	32.1	32.8	33.0	35.7	34.0	33.5	47.9	+14.4***
Take cocaine occasionally	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	54.2	54.2	66.8	+12.6***
Take cocaine regularly	73.1	72.3	68.2	68.2	69.5	69.2	71.2	73.0	74.3	78.8	79.0	82.2	88.5	+6.3**
Try heroin once or twice	60.1	58.9	55.8	52.9	50.4	52.1	52.9	51.1	50.8	49.8	47.3	45.8	53.6	+7.8***
Take heroin occasionally	75.6	75.6	71.9	71.4	70.9	70.9	72.2	69.8	71.8	70.7	69.8	68.2	74.6	+6.4***
Take heroin regularly	87.2	88.6	86.1	86.6	87.5	86.2	87.5	86.0	86.1	87.2	86.0	87.1	88.7	+1.6
Try amphetamines once or twice	35.4	33.4	30.8	29.9	29.7	29.7	26.4	25.3	24.7	25.4	25.2	25.1	29.1	+4.0**
Take amphetamines regularly	69.0	67.3	66.6	67.1	69.9	69.1	66.1	64.7	64.8	67.1	67.2	67.3	69.4	+2.1
Try barbiturates once or twice	34.8	32.5	31.2	31.3	30.7	30.9	28.4	27.5	27.0	27.4	26.1	25.4	30.9	+5.5***
Take barbiturates regularly	69.1	67.7	68.6	68.4	71.6	72.2	69.9	67.6	67.7	68.5	68.3	67.2	69.4	+2.2
Try one or two drinks of an alcoholic beverage (beer, wine, liquor)	5.3	4.8	4.1	3.4	4.1	3.8	4.6	3.5	4.2	4.6	5.0	4.6	6.2	+1.6*
Take one or two drinks nearly every day	21.5	21.2	18.5	19.6	22.6	20.3	21.6	21.6	21.6	23.0	24.4	25.1	26.2	+1.1
Take four or five drinks nearly every day	63.5	61.0	62.9	63.1	66.2	65.7	64.5	65.5	66.8	68.4	69.8	66.5	69.7	+3.2s
Have five or more drinks once or twice each weekend	37.8	37.0	34.7	34.5	34.9	35.9	36.3	36.0	38.6	41.7	43.0	39.1	41.9	+2.8
Smoke one or more packs of cigarettes per day	51.3	56.4	58.4	59.0	63.0	63.7	63.3	60.5	61.2	63.8	66.5	66.0	68.6	+2.6
Approx. N =	(2804)	(2918)	(3052)	(3770)	(3250)	(3234)	(3604)	(3557)	(3305)	(3262)	(3250)	(3020)	(3315)	

SOURCE: Johnston, et al. 1988.

NOTE: Level of significance of difference between the two most recent classes: * = .05, ** = .01, *** = .001.NA indicates data not available

[a] Answer alternatives were: (1) No risk, (2) slight risk, (3) moderate risk, (4) great risk, and (5) can't say, drug unfamiliar.

Changes in perceived risk have been coupled with an increase in the proportion of high school seniors who disapprove of drug use. For example, 71.6 percent disapproved of occasional marijuana use and 89.2 percent disapproved of regular use. Regular cigarette smoking was disapproved of by 74.3 percent of respondents, and 92.2 percent disapproved of those taking five or more drinks nearly every day (Johnston et al. 1988).

Attitudes toward drug use have shifted markedly in a conservative direction, and these changes are related to the downward trends in reported use. The findings suggest that although significant percentages of young people do not disapprove of drug-using behavior or consider it a serious risk, there is less and less support for use among American youth, whether experimental, occasional, or regular. The possible exception is alcohol use, for which the changes are more gradual but still apparent.

The Reality of the Drug Problem

A 1989 Gallup poll found that Americans now consider drug abuse the country's most serious problem (San Francisco *Chronicle* 1989). Given the foregoing encouraging trends in attitudes and prevalence, one might reasonably ask why concern about the problem seems to be at an all-time high while the most reliable data available indicate the problem is noticeably less serious than it was almost a decade ago. This contrast seems like a strange paradox. As noted by Johnston (1989), the U.S. drug problem, as measured by national surveys, peaked much earlier than 1986, yet that was the year when media coverage of drugs peaked.

To some degree the answer lies in the complex, multidimensional nature of the drug problem. In fact, the United States has many different kinds of drug problems involving a variety of chemical substances. For example, much of recent attention has centered on "crack" cocaine and the violent crime associated with using and selling this drug. Another aspect of the problem has been the growing resistance to law enforcement efforts of domestic and international drug dealers. Also, the drug problem is significantly different among the well-educated than among school dropouts and residents of low-income communities. It is more pronounced in large cities than anywhere else.

According to Johnston (1989), perhaps the greatest concern is that despite the expenditure of billions of dollars on enforcement, in recent years the public has been unable to avoid the conclusion that "we were losing the war on drugs. Something was wrong. The public and the media both knew it, and both were increasingly frustrated and alarmed at the inability of their social institutions to handle the problem."

This dilemma is compounded by the difficulty of getting at the root of the problem: the widespread demand for drugs. Although there has been a consen-

sus for much of the past decade (at least among policymakers) that demand reduction must be a high priority, drug busts (noted Johnston) are "a lot more graphic, dramatic, and colorful than pictures of kids in prevention classes, parents working together, and city councils discussing new policies—the visuals [on television news shows] that might be associated with demand reduction."

As long as Americans look for a "quick fix" for the drug problem that will play well on the nightly television news, this dilemma may persist.

An Overview of Prevention Models and Approaches

The drug problem among American youth first became a public concern in the middle to late 1960s—approximately 20 years ago. Since that time a wide variety of approaches to prevention have been tried and much has been learned. The single most noteworthy conclusion from two decades of trial and error is that so far no single strategy has demonstrated unqualified success (Benard 1988; Klitzner 1988; Bangert-Drowns 1988; Tobler 1986; Polich et al. 1984; Schaps et al. 1981, 1984; Swisher and Hu 1983; Moskowitz 1983, 1989). However, some strategies may be more promising than others.

A majority of prevention efforts have focused on ways to reduce the demand for drugs, most often by trying to change individual behavior. Yet of the many varieties of programs implemented in the past two decades, few have addressed significant theoretical concerns. Fewer still have had successful results beyond superficial changes in knowledge and attitudes. Further, the research and evaluation methodologies used in most of these programs have been consistently weak.

The obstacles to designing, implementing, and evaluating prevention programs have been numerous. Not least among them has been the conceptual distinctness of programs focusing on alcohol, illicit drugs, and tobacco. Until relatively recently, separate literatures have existed in each area of specialization, despite the seriousness of polydrug use and evidence of progressive stages of drug use, beginning with tobacco and alcohol and moving on to illicit drugs (Clayton and Ritter 1985; Kandel and Logan 1984; Yamaguchi and Kandel 1984; Kandel 1975). There has also been a tendency for substance abuse professionals themselves (i.e., program developers and evaluators) to focus on differences in their areas of specialization rather than to seek out common ground.

In some ways this separation reflects real and meaningful distinctions. Depending on the particular chemical substance in question, important differences exist in the conditions and contexts of use. Cigarettes and alcohol are legal, socially acceptable drugs—at least for adults. Hence, they are socially accept-

able in the eyes of young people as well, whether legally available to minors or not. The illicit nature of marijuana and other drugs entails prevention approaches that may differ substantially from those focusing on legal drugs.

Early Trends in Alcohol and Other Drug Use Prevention

Other problems in assessing or demonstrating the impact of prevention programs reflect the context in which they are most often presented and their evolution over time. In the early 1970s most drug abuse prevention programs directed at adolescents were educational and were implemented exclusively through schools. Many of those early programs relied on informational approaches and scare tactics. Growing evidence of the ineffectiveness of this approach led to a swing away from information-oriented programs toward "affective education" and alternative approaches.

Affective education was based on the assumption that drug use is associated with a lack of social competencies, self-esteem, and clear personal values—an assumption supported by research on the correlates of drug-using behavior, mainly among delinquents and addicts (for reviews of this literature see Dembo 1986; Murray and Perry 1985; Lettieri 1985; McAlister 1983; Lettieri et al. 1980).

Affective programs assumed that young people would be deterred from using drugs if their self-esteem, interpersonal skills, and techniques for decisionmaking and problem solving could be enhanced. The alternatives approach emphasized providing alternative involvements and environments for young people—for example, recreational activities and participation in the arts and community service projects. The rationale was that meaningful, fulfilling experiences would counteract the attractions of drugs.

Each of the foregoing strategies still has strong advocates. It is not at all unusual, for example, to encounter school-based prevention programs that focus mainly on building self-esteem in young people, and many programs still depend largely on presenting information about drugs. At times prevention experts and researchers talk among each other as if a lack of convincing impact evaluation has permanently discredited these approaches. Charged with doing something about the drug problem, however, schools (the main purveyors of youth-oriented prevention programming) use what is available—and often what is easiest to implement.

To some extent trends have also been fickle. For example, the first generation of information-focused programs in the 1970s was denounced by the Federal Government's leading drug abuse agency at the time, the Special Action Office for Drug Abuse Prevention (SAODAP). After reviewing the effects of federally

funded drug abuse prevention curriculums in the early 1970s and concluding that misinformation and negative effects were widespread, SAODAP imposed a temporary ban on Federal funding of drug information materials. Thus, for a time just the presentation of facts about drugs was considered counterproductive. Yet today it is widely accepted, partly because of research on prevention programs conducted nearly a decade later and partly because of common sense (see, e.g., Schaps et al. 1984), that drug information should be included in programs designed to prevent drug use.

Alcohol-Oriented Programs

Although often similar to drug prevention programs when introduced in school settings, alcohol-related programs evolved in somewhat different ways. We can characterize the many explanations of the etiology of alcohol use as falling into two camps, one focusing on individual and sociocultural aspects of alcohol use and the other emphasizing alcohol availability (Frankel and Whitehead 1981). Prevention efforts in the first area include education and media approaches and have tended to resemble the kinds of curriculums designed to prevent drug use, that is, placing the responsibility on individuals to make constructive decisions about alcohol use based on factual information.

In addition, the omnipresence of alcohol in the social and cultural environment and lessons from alcohol abuse prevention strategies abroad dictated environmentally oriented approaches. Some environmental and regulatory measures target physical, social, and economic aspects of alcohol availability (Moskowitz 1989). Others focus on reducing the incidence of alcohol-related problems: for instance, formal social controls regulating drinking and driving, possession of alcohol, and intoxication; or environmental safety measures designed to reduce the incidence or severity of alcohol-related injuries. In recent years these approaches have increasingly overlapped. Each is seen as being in addition to, rather than instead of, the others.

Some environmentally oriented prevention approaches have been youth specific (e.g., focusing on the effects of changes in the minimum drinking age on alcohol-related damage or of excise taxes on consumption among youth [Wagenaar 1986; Grossman et al. 1984; Vingilis and DeGenova 1984]). The majority of strategies targeted at children and adolescents, however, have been primary prevention programs, educational in nature and mostly school based. As with drug-oriented approaches, these have been noteworthy in demonstrating some impact on knowledge and attitudes but little or none on behavior (Moskowitz 1989; Braucht and Braucht 1984; Hewitt 1982; Wittman 1985; Kinder et al. 1980; Staulcup et al. 1979).

New Developments in Smoking Prevention

In line with the focus of the alcohol field on public policy issues, many smoking prevention programs in recent years have emphasized social influences and policy changes (Pentz et al. 1989; Snow et al. 1985; Herschman et al. 1984; Flay et al. 1983; Lewit et al. 1981; Johnson 1981). These programs have included efforts to generate a broad consensus about the dangers of tobacco smoking (Syme and Alcalay 1982) and to bring about changes in policies affecting cigarette advertising and excise taxes, among other aspects of the environment in which cigarettes are sold and used.

The most important development in smoking prevention programming in recent years, however, has been the emergence of school-based strategies focusing on change in individuals. The earliest smoking prevention programs were information or fear oriented, based on the assumption that if young people were given accurate information about the dangers of smoking they would abstain (Thompson 1978). Like similar approaches in AOD education, these programs typically had an impact on knowledge, much less impact on attitudes and values, and little impact on actual behavior.

Faced with the lack of success of the traditional information-oriented approaches, many researchers began to consider ways of addressing the social milieu in which young people initiate smoking. The result was a new generation of smoking prevention programs developed in the early 1980s that has drawn widespread favorable attention (Elder and Stern 1986; Flay et al. 1983; Schinke et al. 1985; Murray et al. 1984; Botvin et al. 1983; Arkin et al. 1981; Perry et al. 1980; Evans et al. 1978).

These programs were derived in part from Evans's "social inoculation" theory, based on McGuire's (1969) concept of "cognitive inoculation." The approach suggests that if young people are provided with information, counterarguments, and techniques with which to resist peer pressures to smoke, they are more likely to abstain (Evans et al. 1978). Bandura's social learning theory also contributed to the new generation of smoking prevention programs. Bandura's work emphasized the role of the social context and the relevance of a sense of personal efficacy to risk behaviors (Bandura 1977).

Most of the new generation of smoking prevention programs deemphasized the long-term health consequences of smoking in favor of a focus on short-term effects. They taught students about the social influences to smoke, offered training in behavioral skills for resisting those influences, corrected misinformation about social norms (i.e., contrary to popular opinion, most people do not smoke), and frequently used videotapes, films, and peer leaders. What was most appealing about this new generation of social competencies programs (also sometimes referred to as "saying no" programs) was their apparent impact; in

many cases a significant effect on young people's decisions not to smoke for periods of up to 2 years was reported. (Longer term effects have not been demonstrated, however, and short-term effects appear to decay over time.) In recent years program developers have borrowed increasingly from these programs in developing strategies for AOD use prevention and programs focusing on multiple drug use.

Toward a Broader Concept of Prevention

One of the most important conclusions to be reached after roughly two decades of AOD use prevention programming is that no single strategy has demonstrated long-term impact. A close corollary that has gained increasing recognition in recent years is that it may be a mistake to think in terms of a single strategy as the solution. Indeed, a consensus has begun to emerge favoring a much broader view of prevention than characterized past approaches, focusing on social, cultural, and legislative aspects of prevention—the environmental issues that have always been an element of the drug abuse problem—as much as on individual responsibility.

A number of factors have contributed toward this broader view. One has been the increasing involvement of volunteers based in local action-oriented groups and networks. Mothers Against Drunk Driving (MADD), Students Against Driving Drunk (SADD), the Group Against Smoking Pollution, and the hundreds of parent groups and community-based antidrug organizations across the country are examples. These groups often develop strong political skills and are adept at gaining and maintaining high public visibility through use of the mass media. Although their collective impact is impossible to measure, it has been significant.

Two critical elements in the success of such groups have been their lack of prior disciplinary constraints and the firsthand experience of many of their participants. Disciplinary constraints refer to the problem of being bound by professional or academic training in a particular area of specialization. Psychologists, for example, tend to understand problems and causes in psychological terms only, often paying little attention to other key variables. Because grassroots, nonprofessional groups are essentially free of such limitations, they often have a fresh perspective on social and health problems that specialists lack. They do not know certain things "can't be done."

Participants' direct experiences with drug problems, often through the involvement of their children, neighbors, and relatives, have been another key factor. Members of MADD have often been tragically affected by the drinking of others. Many parent group leaders have been motivated by feelings of powerlessness

and outrage when their children succumbed to the influence of drug-using peers (Manatt 1984). This element of being directly involved in and affected by problems associated with drug use has functioned as a powerful incentive, sustaining the energy and commitment of volunteers and activists over long periods of time.

While parents and community activists have been pushing for broad changes in laws, policies, and community norms at the grassroots level, new forms of national leadership have emerged that further complement and reinforce broader views of prevention. For example, in 1988, California voters passed the Proposition 99 initiative despite a nearly $20-million campaign by the tobacco industry to defeat it. This law raised taxes on tobacco products by 25 cents, and the money is to be used for youth-oriented preventive education, research, and health care for indigent people with tobacco-related medical problems. Another example is the efforts of the Center for Science in the Public Interest (CSPI) to alter policies affecting the advertising of alcoholic beverages. Beginning in the mid-1980s, CSPI collected more than 1 million signatures on a petition to ban alcohol advertising on radio and television or allow for equivalent time for public health-oriented messages. Hearings on this issue were held in both houses of Congress in 1985. Although the effort was ultimately defeated, it represented a significant shift in thinking about the prevention of AOD problems. Similar initiatives continue to be pursued by coalitions of grassroots and national groups.

Similarly, before retiring from the Public Health Service in 1989, Surgeon General C. Everett Koop, working closely with a variety of national leadership organizations, built a constituency for policy-oriented initiatives related to cigarette smoking and the marketing of alcoholic beverages. Aided by the Surgeon General's leadership, legislators and health activists succeeded increasingly throughout the 1980s in passing numerous Federal, State, and local laws governing smoking in public places. Pressures remain strong for greater regulation of the sale and advertising of cigarettes and alcohol.

The field of AOD use prevention has also been influenced in recent years by research into the etiology of drug use and related problems that points to more comprehensive approaches for prevention programming. An example of this is the work of J. David Hawkins and associates at the University of Washington (Hawkins et al. 1986, 1987). Their analyses of research on drug use and other problem behavior of children and youth, combined with experimental programs they have developed to test new theoretical approaches, have drawn attention to the key areas of the family, the peer group, the school, and the community as appropriate settings for prevention efforts. The implication is that prevention programs must attempt to affect all these areas, not just one or another.

In addition, a recent focus of health professionals and researchers that has helped to broaden concepts of prevention has been an emphasis on the kinds of direct and indirect education about alcohol, tobacco, and other drugs presented by the mass media (Wallack 1984; Flay and Cook 1981; Blane and Hewitt 1977). Included are efforts to stimulate public discussions of values regarding drug use; to influence media portrayals of alcohol, cigarettes, and other drugs; and to modify marketing and advertising of these drugs (Farquhar et al. 1984; Atkin 1983; Flay and Sobel 1983; Solomon 1982; Flay 1981; Hochheimer 1981; Wallack 1981; Robertson 1980).

One example of a particularly promising approach to working with media personnel to present a less glamorous, more accurate portrayal of drinking in television programs is the "cooperative consultation" technique. Through cooperative consultation, public health professionals work closely with television producers and program developers in a variety of ways to assist them in creating programs and messages that are likely to have a more positive public health impact (Breed et al. 1984; Breed and De Foe 1982).

Other promising media-oriented approaches involve cooperative consultation of health professionals with local newspapers, advocacy and activism such as that of organizations like Action for Children's Television and CSPI, and mass media campaigns guided by social marketing theory and conceived with a communitywide, not solely individual, focus (Solomon 1982; Farquhar et al. 1981). Of particular note is "media advocacy," the strategic use of mass media to promote public policy approaches to health problems. Media advocacy uses a range of strategies to stimulate broad-based media coverage to reframe public debate to highlight the social, economic, and political, rather than individual, aspects of health problems (Wallack 1990). Insofar as these efforts are directed at changing the social and cultural backdrop to drug use in our society, they are relevant to discussions of environmental approaches to reducing drug problems among children and adolescents.

The broader view of prevention strategies described in this section implies a new way of conceptualizing and planning prevention efforts. There is increasing reluctance to rely on a single strategy or approach; instead, a combination of approaches affecting different aspects of the political, social, and cultural environment, in addition to the individual, are envisioned (Moskowitz 1989; Klitzner 1988; Wallack 1984). Although this broader view remains to be tested and proven, both the research on the impact of prevention programs and a growing appreciation for the complexity of the problem suggest that this new direction for prevention holds significant promise. It calls for cautious optimism at a time when the nation's determination to deal effectively with AOD problems has never been stronger.

Toward a More Comprehensive Model

Prevention may well be coming of age as it moves toward a broader view of strategies and approaches. Nevertheless, this view still is not widely held. Approaches focusing exclusively on changing individuals remain the norm. The demand for quick results using programs that are politically nonthreatening has resulted in a focus on the most manageable unit of analysis and intervention (the individual) with the most conservative strategy (school-based programs). Yet there is a healthy tension in the field between groups pressing for changes in laws and regulations and those seeing school-based education as the most pressing need. Still others are serving to bring both these types of approaches together, highlighting the necessity of both kinds of strategies.

As the prevention field moves away from previous narrow conceptualizations of what it means to prevent drug problems, it is actively building a new framework that provides a model on which to build. The model is not prescriptive, that is, telling us what to do in various situations. Rather, it provides guidelines that can be generalized across problems. Perhaps the key characteristic of the model is that it serves as a mechanism for integrating a wide range of prevention approaches and perspectives.

In practical terms, a model for prevention has to encompass several components and the relationship between them. For example, an approach might focus on providing classroom education (individually oriented) and altering advertising regulations for over-the-counter (OTC) drugs, cigarettes, and alcohol (environmentally oriented). At the same time, the relationship of the environmental effects of advertising to classroom approaches needs to be elaborated (e.g., advertising as an inhibitor of educational messages and a source of inconsistency). Also, it is important to note how the availability of the drug is mediated through the social and physical environment. Related is not only how much alcohol, for example, is available but also where, when, how, and to whom. In addition, the social conditions—norms, values, expectations—regarding alcohol use constrain use patterns and the response of others to these patterns.

Thus, only by addressing the individual in a broader context can education be successful. To speak of education as if it takes place only in a classroom is at odds with reality. Television programming, advertising in all media, films, and family interaction are sources of direct education about cigarettes, alcohol, and marijuana (as much as schools). Friends, others in the peer group, and colleagues in the workplace are also sources of education. Other factors such as price, promotion, and availability provide indirect education through symbolic representations. When alcohol is priced competitively with soft drinks and packaged to look like soft drinks and travel anywhere, a clear message is communicated. That message has little to do with public health; it has everything

to do with selling a product by placing it in the most positive and favorable light.

In practical terms, then, prevention must address the individual and the environment in which the individual makes decisions about lifestyle and health issues. The individual needs to be provided with the best possible skills to negotiate a hazardous environment. Efforts must also be stressed to make the environment itself less hazardous. As the environment becomes less hazardous, the skills become more potent and mastery of the environment increases.

In summary, the program practitioner and the policymaker must plan with each other in mind. They must focus on individuals but only as individuals exist in broader settings such as the school, family, peer group, and community. They must also emphasize other broader environments (e.g., marketing factors, availability of illicit drugs) that exert a significant influence on people's choices and behavior.

This view of prevention can be expressed by the following set of principles on which prevention efforts can be based. As one reviews these principles it is useful to keep in mind the general public health framework of the individual, the environment, and the agent—how they relate to each other and what that relationship implies for intervention and prevention. Some of these principles may seem obvious. Past experience in prevention, however, indicates a lack of success because the underlying principles and assumptions were incomplete or erroneous (e.g., information equals prevention).

First, drug problems are complex and cannot be reduced solely to the level of individual or personal behavior. There is a continuing temptation for parents, policymakers, educators, and planners to simplify these problems by defining them as purely behavioral and thus individual in nature. Any analysis based on this type of approach cannot lead to a full understanding of the problem and hence will result in partial, inadequate programs and policies.

Programs that depend exclusively on teaching information about drugs are an example of an oversimplification of the problem. Programs that emphasize skill development have been somewhat more successful. Apparent initial successes in the area of smoking are now being replicated in AOD programs. Methodological problems—in addition to the basic challenge of convincing youth not to use normatively approved substances like alcohol and tobacco—necessitate considerable caution about these programs. Nonetheless, there is hope that school-based programs rooted in sound social-psychological principles can be successful.

Social competencies programs, like purely informational programs, suffer from a significant conceptual flaw, however. They reinforce a view of problems as properties of individuals rather than of social systems. Individuals as a

critical component of a broad social and economic system need to be an important focus but not the sole focus. Because these problems are linked to the environment of institutions, norms, and community life, it is in this broader context that such problems must be understood. A school program, whether based on an informational or social competencies approach, might well include an emphasis on the role of advertising. Such programs might provide students with resistance skills to help reduce the influence of advertising. Yet the advertisers themselves and the regulatory mechanisms that could be applied to make advertising more responsible would not be considered.

Second, an integrated approach to prevention emphasizes a shared responsibility for addressing problems. Because drug use problems have many different causes, the responsibility for dealing with these problems cannot be limited to one sector of society. Many programs are based on an implicit assumption that the person with the problem bears the sole responsibility for change. This perspective has come to be known as "blaming the victim," after the work of William Ryan (1976). Strategies that blame the victim, or at least fail to acknowledge a shared responsibility, raise serious concerns not only about ethics but also about effectiveness. If many contribute to the conditions that give rise to and sustain public health problems, then it is reasonable that the burden for prevention should be proportionately shared. Further, because the group or community, as well as the individual, stands to benefit either directly or indirectly from the enhanced quality of life that would result from lower levels of public health problems, it is legitimate and proper for many to contribute to the solution.

Individual-level strategies can have a serious unintended consequence of stigmatizing those affected by the problem. Prevention strategies often call on all people to make a specific change, but not all people have the same resources on which to draw. The result can be a concentration of lifestyle behaviors that detracts from health in lower social status groups. This result has happened with cigarette smoking, which is becoming a lower-class behavior (Hall 1985). The risk is that as behaviors become concentrated among those with the fewest political and personal resources, the likelihood of more legal and economic sanctions against the behavior increases. Providing nonsmokers with reduced insurance rates, for example, must result from an increase in the premiums for smokers, who may already have more difficulty getting insurance at affordable rates. Thus the penalty falls on those who may be most in need, partly due to their social class and associated higher health risk.

Third, an integrated approach to prevention emphasizes long-term planning as well as short-term crisis intervention. Our society typically responds to crises but is less willing to plan to prevent situations that give rise to them. Longer term planning is appropriate to the prevention of drug use problems because they have a long history of intractibility. In addition, a longer term approach

contributes to more realistic expectations about the time nd effort necessary to bring about meaningful change.

It is also important to institutionalize prevention efforts as part of the continuing concerns of the community. Often the lifespan of prevention efforts is brief. The lack of adequate funding, expectations for immediate change, a crisis orientation, and a limited view of drug use problems all contribute to this.

Fourth, information about drugs is necessary but not sufficient to bring about changes in behavior. A strong implicit assumption about prevention has been that information equals prevention. The relative success of many school-based smoking prevention programs, it can be hypothesized, is based in part on the development of skills as well as knowledge, supported by antismoking attitudes in the broader social environment. Recent accelerated declines in smoking among those in the larger community are also explained in part by the doubling of the excise tax on cigarettes.

Strategies that are considered absolute (sufficient alone) and that are conceived and implemented in isolation have serious flaws. Such strategies are not consistent with the complex nature of the problem and, if successful at all, are not likely to be successful enough to create meaningful change over the long term.

Fifth, comprehensiveness is an important part of an integrated approach. This principle does not simply mean "more" of a prevention strategy, as so commonly seems the case. Rather, it refers to the qualitative relationship between the different components of an overall strategy. More of something that did not work in the first place can become part of the problem—a barrier rather than a solution (Watzlavick et al. 1974).

Comprehensive approaches are based on a carefully thought-out assessment of the relationship of the problem to resources, needs, goals, and conflicting interests. Because the nature of the problem is often unclear, difficult to define, and difficult to reach agreement about, being comprehensive involves increasing the number and type of variables to be considered. Traditional approaches often seek to eliminate variables and thus seek precision rather than comprehensiveness; they attempt to refine the cause-and-effect relationship. Although appropriate for well-structured problems, precise approaches are unrealistic for the loosely structured (Ackoff 1974) or "wicked" problems that the public health field addresses. Thus, integrated approaches to prevention may have to attend to variables such as social and economic position and underlying social inequalities that are often ignored because they tend to blur rather than clarify the process.

In sum, the principles of an integrated approach to prevention suggested here address the need to understand and respond to problems as properties of the

broader social and physical environment in which individuals live. Because the causes and consequences of drug use exist across different levels of the broader system, solutions need to be conceived of in relational rather than absolute terms. Approaches based on long-term planning rather than short-term problem solving are essential to serious prevention efforts.

Conclusion

Currently the signs point to significant changes in how America understands, behaves, and reacts to alcohol, tobacco, and other drug issues. Positive trends in use and attitudes, coupled with strong, concerted community action and continued high visibility, are encouraging. The opportunity to speak, be heard, and make a difference has never been greater.

Enthusiasm, good intentions, and certainty of the righteousness of the cause are not, however, sufficient to stimulate change. Bold, broad-ranging, comprehensive policies and programs that approach drug-related problems from a variety of perspectives are crucial. Unless the underlying conditions that contribute to the problem are addressed and altered, the fundamental nature of the problem will not change.

There has been and continues to be an inconsistency between social policies regarding alcohol, tobacco, and other drugs and programs designed to prevent drug use. The successful implementation of broader, environmentally oriented approaches depends on a population well informed about the need for such approaches and willing to support them.

Prevention needs to be visionary and idealistic, but it must also be practical. In order to move toward more effective public policies it is necessary to educate policymakers, as well as a range of others, about inconsistencies in the way we as a society address drug issues. Further, it is critically important to emphasize a wide range of possible mechanisms for change and examine how these mechanisms have been used in the past and could be used in the future. Educational efforts regarding the social- structural nature of drug problems are needed so that broad-based prevention will be redefined and accorded greater importance throughout the society.

This chapter can be a catalyst for discussions about alternative approaches to prevention. A new vision of prevention, as outlined here, will be more difficult and more complex than traditional approaches. But it will be this type of prevention that brings our society closer to the goal of reducing to the greatest extent possible the damage associated with the use of alcohol, tobacco, and illicit drugs among youth.

Notes

1. We frequently use the term "drugs" and/or "AODs" to refer to all these substances.

2. These findings should be interpreted in light of some concern about the validity of survey answers about drug use. Reported rates may be biased by respondents who, affected by the changing social climate with regard to drug use, minimize estimates of usage. If the bias in answers has been systematically low over the course of longitudinal surveys, the picture of general trends is unaffected. Evidence of a changing environment of attitudes and usage, however, may suggest an increased tendency toward under-reporting.

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CHAPTER 2

On Drugs and Mass Media in America's Consumer Society

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Introduction

The mass media play a critical role in defining both our culture and our behavioral norms that have an impact on public health. Therefore, they are a logical focus for environmental prevention approaches. In this essay written from the viewpoint of a regular observer of mass media, Todd Gitlin gives a new twist to the notion that the medium is the message. With regard to drug use, Gitlin argues, just as influential as the specific content of mass media messages may be the sense of instant gratification and fast-paced consumerism that pervade mass media styles. Ours is a culture of consumer-oriented thrill seeking, and Gitlin traces the origins of this cultural orientation to the roots of modern mass consumerism. By their very nature, Gitlin concludes, the media reflect that culture and have conditioned Americans to accept drug use as part of it.

There is much speculation nowadays about the relationship between mass media and the use of drugs. With all manner of drugs widespread and television, movies, records, and other media replete with references to drugs—many of them uncritical, to say the least—it is reasonable that questions should be raised about the media's contribution to drug use. But the discussion must proceed with care. There is a tendency to reduce the tangled web of social process to single threads, whether on the individual or the social plane. There is, moreover, a tendency to treat individual social problems in isolation from others. Amid general frustration over the intractability of drug problems, as well as of many other aspects of American life today, we are witnessing throughout public life a general oversimplification of the discussion of public issues. Especially because the public discussion of these issues is ordinarily surrounded by a powerful halo of emotion, it is advisable that the discussion be pursued with due attention to our larger social and historical setting. This chapter is a preliminary attempt to clarify the terms of an informed discussion.

The Rise of a Consumer Society

To begin asking the right questions about how the mass media bear on drug use in America, we must first consider what drugs mean to the people who use them. Drugs are physical substances, and intoxication is a physiological and psychological state. But the meaning of a given drug to the people who use it, even the experience of the drug itself, differs considerably from one society, one sector, one group, even one moment in time to another. That meaning is not preordained in nature; it is constructed—and not by wholly free human beings, but rather by people with specific opportunities, desires, and limits, operating in and among specific institutions. The desires, opportunities, limits, and institutions belong to a particular society undergoing a particular historical process. To put it another way, the meaning of drugs to those who use them exists in history. So, too, it is necessary to speak of the causes of drug use, including addiction, as existing in history. As much current research suggests, "there is little agreement as to the etiology of addictive disorders" (Shaffer 1985, p. 66). A comprehensive approach must look at many possible sources and their interactions. As Shaffer (1985, p. 69) put it: "Rapidly growing research knowledge has . . . suggested that drug effects and patterns of drug use are the result of complex interactions between pharmacological, physiological, psychological, sociocultural, and behavioral variables."

In the complex of causes there is widespread suspicion today that the mass media, immensely pervasive and at least frequently persuasive, have some bearing on drug use. I intend in this essay to suggest a framework for examining this question. In order to grasp how the structure and policies of our media industries bear on drug use, I want first to consider the meaning of drugs to Americans, particularly American youth, in the final third of the 20th century, against a general social, economic, political, and cultural background. (When I speak of "drugs" here, I shall be speaking primarily of alcohol, marijuana, cocaine, LSD, and related psychedelics.) I will review the evolution of the media industries in the same context, for the society's means of mass communication also take on their meaning and achieve their effects in a larger historical context.

In certain societies, mostly those our culture designates as primitive, certain drugs are infused with religious significance. They are administered in prescribed ceremonies, established in tradition, and credited with the capacity to bring humans into contact with supernatural forces. In these societies, the realm of the sacred is central to the rest of social life, and priests, shamans, and other religious authorities are accorded great authority in all spheres. Economic and social facts are often explained on supernatural grounds. No clear distinction is maintained between religion and culture; the two realms are unified in myth and ritual. In this setting, the ceremonial drugs—at least in principle—have the sanction of the society's most treasured values.

American society is organized according to much different principles. Along with the rest of the industrialized world, it devotes the bulk of its social resources to economic activity. Its social institutions are parceled out into distinct if overlapping realms: state (including law), economy, religion, and culture. Although honored in the breach, there is something of an incest taboo that, in principle, bars excessive intermingling among these realms, considering it corruption or conflict of interest. Accordingly, in American society the use of drugs (aside from ceremonial wine) generally does not rest on religious grounds or the sanction of religious authority. No obligation attaches to drug use; if anything, there are strong sanctions (including legal ones) against it.

Rather, drugs in America take on their meaning in a much different tradition. It is this same tradition that has given rise to, and surrounds, the American means of mass communication. This tradition is the cultural air we breathe, and like its physical counterpart it is—except under emergency conditions—invisible. To understand the impact of the media on drug use, we must first render visible the tradition in which both media and drugs are situated. There are both continuities and discontinuities to attend to.

The dimensions of this tradition are several, but they form a coherent whole. There is, first of all, the idea of the right of individual gratification, which despite other ideological commitments embedded in our history—in particular, the republican tradition of civic virtue (Bellah et al. 1985)—has shown remarkable force and consistency throughout 200 years of American history. As Alexis de Tocqueville was the first to observe at length a full 150 years ago, American culture rests on the irreducible prerogatives of the individual. The concept of individualism was coined by de Tocqueville ([1835] 1954) to describe precisely the American tendency toward private withdrawal from the larger society. Our political institutions are predicated on a belief in inalienable natural rights. The deep premise is that freedom is precisely the freedom to forge the means to private happiness. The idea of an individual's right—even obligation—to pursue his or her particular happiness is embedded in American culture from Daniel Boone to Madonna. Recent history has extended the scope of this fundamental social value, but the roots of it have been deep in American culture from the beginning.

The inalienable right to pursue happiness was not established in isolation, of course. Culture is not a single note, but a pattern that harmonizes what would otherwise be discordant. From 17th-century puritanism onward, American culture has also enshrined the community. The community—and in particular its church—was to be the repository of morality. The community was to guide the individual, shape his or her desires, bind the individual to a larger net of obligations. The puritan ideal of "the city upon a hill" is a utopian constant throughout American history (Baritz 1964). Of course, the moral community has often been defined as an exclusive camp, relegating outsiders to the status

of savages and inferiors; thus this tradition has frequently been invoked to justify theocratic excommunication, genocide of indigenous people, and expeditionary wars. But the tradition of moral community has also been called on to militate against slavery and for the civil rights of blacks, women, and other oppressed populations.

Proceeding from the right of individual gratification, nourishing it and nourished by it, there has emerged a *culture of comfort and convenience*. Its central presumption is that cultural goods and activities exist to give people easy pleasure, not to make demands on them. Americans defer to the established political-economic order while channeling their desires into the acquisition of things. In large measure, ironically, this culture is embedded in what might seem to be its opposite: the American commitment to efficiency, utility, practical results. De Tocqueville observed early that America's cultural practices, its political ideology, and its driving passions were all of a piece. He drew on his study of American popular culture—literature, theater, and oratory—to observe that:

> democratic nations cultivate the arts that serve to render life easy in preference to those whose object is to adorn it. . . . [Their works] substitute the representation of motion and sensation for that of sentiment and thought. . . . Style will frequently be fantastic, incorrect, overburdened, and loose, almost always vehement and bold. . . . The object of authors will be to astonish rather than to please, and to stir the passions more than to charm the taste. (de Tocqueville [1835] 1954, pp. 50, 52, 54).

It remains true that American art and sport tend toward a sensational style of entertainment. Contemporary show business already stands visible through de Tocqueville's lenses. Given the national commitment to a popular market and the relative underdevelopment of a high-culture countertradition (there being little landed aristocracy requiring it), the taste for sensation could sweep freely through American culture. Not that puritan morality vanished. Rather, the moral spirit patrolled American culture by becoming its undetachable shadow. In this spirit, America developed cultural forms in which puritanism could blend with the cult of sensation. In the 19th century, for example, there was melodrama, with its schematic jousts of heroes and villains, in which crime ultimately never paid and titillation was always paid for in the coin of the clear-cut moral. And there were the screaming headlines, scandalmongering, and nationalism of the yellow press, appealing at one and the same time to censorious moralism and the pleasure of sensation. Thus the motion picture, advertising, radio, and television industries were reared on a foundation long installed. But although the pursuit of happiness and its moralistic shadow have been central to the American dream since the founding of the Republic, the

continuity should not be allowed to obscure the major transformation that has taken place in the past 100 years.

If American culture was devoted, at least in theory, to the happiness of individuals, it also prescribed a paradoxical path for that pursuit. Rooted in the puritan values of the European colonizers, the dominant culture until the late 19th century valued hard work, self-sacrifice, and the building of character above all (Susman 1984). Such pre-Revolutionary mottoes as Benjamin Franklin's "Time is money" and "Early to bed and early to rise, makes a man healthy, wealthy, and wise" were the guiding principles of a social order in which economic activity ranked supreme. By adhering to such principles, men committed themselves to accumulating capital, planning to improve their station, and getting ahead in the world, while women were expected to stay at home, creating oases of care in a world otherwise devoted to advancement and calculation. Frivolity was to be avoided, or at the least, indulged with great care.

But in the late 19th century, on the strength of the great industrial expansion that followed the Civil War, another vision began to vie with the old puritan ideal. From the success of puritanism grew a desire to transcend, if not repeal it. The belief grew that America could be, or indeed already was, a land of abundance (Susman 1984). Self-sacrifice was no longer quite so necessary; the goal of material well-being, always the deferred object of the puritan's sacrifice, was now apparently at hand. If the old culture emphasized production, the new culture emphasized consumption. No longer would pleasure have to be postponed, at least not quite so long. As the number of hours devoted to work declined, so did the number of hours devoted to "leisure"—once a word reserved for gentlemen—increase. But the change was more than quantitative. Such changes are always registered in shifts in vocabulary, and as the historian Warren Susman (1984) pointed out, an extraordinarily revealing array of new terms became commonplace early in the 20th century: "*plenty, play, leisure, recreation, self-fulfillment, dreams, pleasure, immediate gratification, personality, public relations, publicity, celebrity.*" These terms arose to describe a new way of life in which the pursuit of fun was central and essential. Alongside the old mandate to produce there grew up what Wolfenstein and Leites (1950) called the "fun-morality": Thou shalt have fun. Enjoyment became a central measure of experience.

The pursuit of fun was not simply a transformation in mores. In the decades around the turn of the 20th century it also became central to economic growth. Alongside the production of basic industrial goods, food, clothing, and shelter, investment—and public fascination—shifted toward play, fashion, travel, and amusement. Frivolity became an admirable quality, something to cultivate. In the process, what was generated was called by sociologist Daniel Bell (1976), following C. Wright Mills (1951), a "cultural contradiction of capitalism": people were expected to sacrifice themselves during the workday in order to acquire

the wherewithal to amuse themselves during the rest of their lives. In the process, the well-being of the economy became dependent on the ever-expanding cornucopia of consumer goods. The consumer's frivolity was good, indeed necessary, for the economy's serious purpose. Disposable income had to be disposed of if production were to be expanded. Advertising, along with annual model changes, rapid turnover, the multiplication of options and accoutrements, guaranteed a high volume of consumption. The department store, and later the supermarket and shopping mall, emerged for the display of the tantalizing fruits of abundance; these were the temples of the consumer society. Production, packaging, marketing, advertising, and sales became functionally inseparable.

Part of this great transformation into a society of consumption was the flooding of the everyday world with mass-produced images. Integral to the general boom in the production of consumer goods and conspicuous with it were machines that were mass produced to manufacture sounds and images: cameras, phonographs, motion pictures, radios, televisions, and all the component parts, programs, accessories, and attendant commodities designed to stretch their usefulness. First photography, then motion pictures, and eventually their color versions, were peculiarly adept at conveying the tangibility of things and hence their desirability as possessions (Berger 1972). All cultures generate symbols, but the culture of consumption did so with unprecedented gusto, sweep, centralization, and pervasiveness. In particular, to create and focus consumer demand, advertising became ubiquitous.

For the most part, the advertising of the 19th century had emphasized information: objects for sale could perform certain functions, were available in certain sizes, cost certain amounts. The new advertising tended to feature commodities as central features of the good life. The objects advertised were now surrounded by auras; they added up to an "American way of life." Advertisements were now the pictures of a good life the commodity made possible. The implicit promise was that with the purchase one could remedy a deficiency in one's life, even in one's personality; one could achieve freedom, or comfort, or respectability, or otherwise import worthy goals into one's life. The success of advertising, in other words, lay not so much in its capacity to manufacture needs out of whole cloth but in its capacity to persuade Americans that their desires for freedom, security, status, affection, and so forth could be satisfied through material consumption. Individual advertisements made their particular claims for particular products, of course. Some were more effective than others at generating sales. But no one received advertisements one at a time. Regardless of whether sales resulted, the society was covered by a grid of advertisements, adding up to one unceasing advertisement for personal realization through the goods-centered good life the consumer society had made possible.

Advertising, of course, was only one component in a vast and intricate new machinery of mass communications. As the premium method for financing

America's broadcast system, it became the main route to huge broadcasting profits. But the institution of advertising only sustained and accelerated what was already a national cultural commitment to commercial entertainment. The developers of motion pictures, phonograph records, radio, and finally television aimed—and still aim—to entice the largest audiences possible. To do so, the proprietors and enthusiastic salesmen of the mass communication industries learned how to arouse excitement while accommodating it within a frame of acceptable moral uplift.

The star system evolved as a crucial cement binding the mass media and their audiences into the consumer society (May 1980; Ewen 1988). The obvious differences among movie, television, and recording stars should not obscure the striking continuities. The stars are usually very popular personae: they shoot straighter, romance surer, live happier, rejoice and suffer more grandly than everyday reality permits. The stars, embodiments of glamor, seem larger than life; their extraordinary adventures seem to transfigure the quotidian, just as they succeed in magically transforming audiences into enthusiastic spectators. The stars populate the dreamworlds of their audiences, as the popularity of star biographies, fan magazines, and testimonial ads testifies. The stars are, in the words of the Italian sociologist Francesco Alberoni (1972), "the powerless 'elite.'" Gazing at their images, spectators can safely try out the position of voyeur and collaborator; for brief periods, people not only distract themselves from their immediate circumstances but also enter into the language and setting of glamor. Audiences can safely indulge the extremities of personal life—crime, romance, danger, the pleasures of transgression—in the safety of knowing what they are seeing is only a movie, and that, in the end, good prevails, society is saved, and crime does not pay.

Yet to speak of mass culture as escape pure and simple, without quotation marks, would be deceptive, for through the means of mass communication audiences also get a chance to experience and transpose their own deep and often buried conflicts, desires, and fears, all within the managed forms of the commercially programmed imagination. In the words of Mel Brooks' satirical rock star Fabiola, "We are all singing. I have the mouth."

The media are thus, from one point of view, control systems for the limited and harmless transaction of psychological and social conflicts. It is not surprising that throughout their history the dominant institutions have taken pains to police their content. Through industrywide censorship—from Hollywood's Hays Office and radio's advertising agency scriptreaders to the television networks' "standards and practices" departments—the older, puritan, production-centered culture has attempted to keep a lid on the emerging, consumption-centered wave. The Hays Office was established by the film industry as an alternative to direct Government controls; its code of moral standards, bolstered by the indexes of the Catholic Church-centered National Legion of Decency, regulated movie production from 1930 through 1966 (Rohde 1976). The

television networks have evolved their own censorship bureaus, which routinely screen all filmed and taped programs and commercials and order the suppliers to make changes in language and image. These censorship bureaus function in effect as political brokers, responding to actual and anticipated objections from substantial portions of the viewing public (Gitlin 1983; Montgomery 1989). Major advertising agencies and advertisers also screen programs in which their commercial spots are due to appear and reserve the right to withdraw as they please. Television producers and writers accommodate.

But what formal censorship does not touch is the ideological constant in this enormous profusion of cultural goods: the presentation of a world filled with unlimited opportunities for mobility, pleasure, personal rehabilitation, and fun. Even during the Great Depression, most of popular culture maintained its focus on the pursuit of personal happiness. Hollywood's happy ending was one formulaic way of indicating that the good life was within reach, at least for characters who were willing to abide by the social rules. Hollywood's perfection of slick production values reinforced the advertising view of a world that exists for acquisition. With few exceptions, the sets on television series were well-furnished, well-equipped backdrops to the high-consumption good life. The smooth-looking stars conveyed a sense of a seamless existence. Television conveyed, in Herbert Gold's (1962) phrase, "happy stories about happy people with happy problems." Color television heightened the general aura of slickness. In this fabricated world, the older values of freedom, individualism, and security became attached to the objects of the high-consumption good life, of which the television set itself was emblem as well as showcase. For the poor—who watch a disproportionate amount of television—the television set is a window to the mainstream world from which poverty excludes them. It is both a reminder of their relative deprivation and an enticement to acquisition. That is why during the Black riots of the 1960s looters were especially eager to grab color sets.

The sheer pervasiveness of commercial popular culture must be given its due in any assessment of its significance in American life. In 1909, 27 million phonograph records were manufactured in the United States; in 1983, 578 million (Sterling and Haight 1978; U.S. Bureau of the Census 1984). Statistics for moviegoing are skimpy, but weekly attendance per American household averaged 2.08 movies during the years 1925-29 and 2.57 during 1935-39, before declining with the advent of television in the late 1940s and leveling off in the 1980s (Sterling and Haight 1978;U.S. Bureau of the Census 1984). From 1931 through 1950, in the average household a radio was on for more than 4 hours a day; after falling off through 1960, radio use began to climb again, to more than 3 hours and 15 minutes per day in 1981 (Sterling 1984). Daily television use per household has risen steadily from 4 hours and 35 minutes in 1950 to more than 7 hours since 1983 (Sterling and Haight 1978; A.C. Nielsen Co. 1986). In 1982, 98 percent of American households owned television sets (Sterling 1984); 57 percent owned two or more (A.C. Nielsen Co. 1986). In many households, a

television set is on most of the day, the pictures and sound adding up to a steady accompaniment—or is it a secondhand life?

In important ways, television, more than the other mass media, can be likened to a drug and the audience's dependency on it to a kind of addiction. Depending on the audience and the circumstance, television may variously supply distraction from everyday life, a certain intensity of feeling, or emotional anesthesia. For many people, television is a dulling, low-risk sort of drug. Many people, especially children, watch it in a sort of trance (Winn 1977). Television can be experienced as both a stimulant and a depressant. Like ingested drugs, it is often combined with food or conversation. Viewers say it makes them feel "drowsy," "weak," and "passive" (Czikszentmihalyi and Kubey 1981). People tend to turn to television when in personal difficulties, and to binge on it (Pearlin 1959). One dose leads to another. Especially because the images are so accessible, heavy television viewers have great trouble breaking the habit. Even dollar incentives frequently fail. In one informal survey, a newspaper offered $500 to each of 120 Detroit-area households if they would give up television for a month and agree to talk about their "withdrawal"; 93 refused (although it is possible that some of them objected to the interviewing and not the abstention). In the five families chosen, there was an upsurge in anxiety, depression, insomnia, and chain-smoking (Trost and Grzech 1977). Especially but not exclusively among the most educated groups, many viewers speak of television as a shameful habit, something faintly illicit and damaging like smoking or excessive drinking. They would like to quit but cannot bring themselves to do so.

Television has the connotation of plenitude; it seems to embody consumer society as a whole (Miller 1987). Available at the touch of a button during almost all hours of the day, its range of choice at times appears to be synonymous with American freedom. For those who do not subscribe to cable, and for almost all the audience during most of the history of television, the flow even appears to be free (although consumers are paying higher prices for products to subsidize advertising). Even the term "tube" expresses television's role as a cornucopian conduit of the endless materiel of the good life, through commercials as well as the nonstop flow of programming. "Boob tube" expresses an unconscious connection with regressive oral dependence (R. Atkins, personal communication, 1976). Dependence on television is training for adaptation to consumer society. On the one side, television watching, like the rest of the high-consumption way of life, is motivated by a search for pleasure, escape, and anesthesia; on the other, dependence on television is dependence on the prepackaged forms through which pleasure, escape, and anesthesia can be comfortably and conveniently procured.

Youth, Rebellion, and Drugs

In the aftermath of World War II, a combination of forces—the unrivaled supremacy of the American economy in a devastated world, pent-up consumer demand in the aftermath of the Great Depression, and technological innovation—led to the greatest unchecked period of economic growth in the history of the world. A growing percentage of the population moved to the suburbs. Consumer spending flourished. Fueled by consumer debt, the boom had major social and cultural consequences that continued even after the boom had evaporated in the early 1970s and America had been plunged once again into economic disarray. One of the pivotal ideas of the boom period was the principle of instant and unbounded gratification. The profusion of consumer goods was accompanied by the idea that good things in abundance could and should be attained at the touch of a finger. The cornucopia of goods was now showcased in the living room through televised images, which of course, could be summoned at will. Television game shows became the supreme expression of the consumerist fantasy, trading on popular hopes of winning instant admission to the marvelous realm of unlimited goods.

Throughout the 19th century, one major focus of American newspaper advertising had been patent medicines (Schudson 1984; Fox 1985). The Lynds (1929) found that a full quarter of the ads in the Muncie, Indiana, papers of 1890 were attempts to sell home remedies. Television gave new, graphic life to America's infatuation with legal drugs. Personal expenditures on medical drugs rose from $635 million in 1940 to $18.5 billion in 1980, a thirtyfold increase (U.S. Bureau of the Census 1975, 1984). Amid the larger consumer-goods cornucopia, television ads drove home the point that commodities (OTC remedies in particular) could be relied upon for "fast relief." Whatever the precise effects of exposure to these ads—and precise effects cannot be measured in any case—the youth generation that emerged in the 1950s was the first to be reared in the dominion of the television set. More than any generation in history, it grew up expecting unbounded affluence, hoping for citizenship in a brave new world of consumer plenty and satisfaction without limits.

Among the major features of postwar America was the emergence of a distinct youth subculture. Although the youth culture mocked and disdained the mass media, especially television, it was nonetheless dependent on the mass medium that television had left without a raison d'+tre: radio. With the aid of radio and its disk jockeys, rock and roll became the defining pulse of a generation and the center of the youth culture. (Other media also furnished the American young with popular images of disengagement and rebellion, especially Marlon Brando and James Dean's sullen antiheroes and J.D. Salinger's marginalized characters.) With rhythms and intonations borrowed from Black rhythm and blues and

lyrics preoccupied with teenage problems, rock music cut across class and regional lines to become an identity badge for American youth.

It would be a mistake to think that rock, once defined as a generational phenomenon, automatically became a music of rebellion. There was an intrinsic component: the music had connotations of sexiness, and some of the performers achieved notoriety by drawing it to the surface. But it was also partly because churches and newspapers denounced rock and roll that it became understood by a good part of its audience as an act of generational rebellion. Rock defied the ethos of production with an ethos of expression. It was emotional and kinetic; it called on its listeners to "twist and shout." Thus rock was partly an extension of longer term trends in the culture of consumer society, but it also stretched past old limits. Rock, like the youth culture as a whole, presupposed the culture of mass consumption. It stood on the shoulders of the parental culture.

This youth culture was not the first in American history. The 1920s, another period of prosperity, also saw the rise of a distinct youth subculture among college students—distinct dress, music, dances, sexual mores, slang, and overall style (Fass 1977). But several things were different about the youth culture of the 1950s and 1960s. For one, the youth cohorts were enormous in scale. More than 76 million babies—almost one-third of the current population—were born between 1946 and 1964 (Jones 1981). More babies were born in the 6 years beginning in 1946 than in the previous 30 years (Jones 1981). Second, the adolescents of the 1950s and 1960s had an unrivaled amount of money at their disposal. They bought radios, records, clothes, snack foods, even cars at an unprecedented rate. The sheer size of the youth bulge and the relative affluence of a significant proportion made the young a key target for advertisers and made it easy for the young to dominate the national iconography. Their numbers and affluence heightened their sense of historical singularity. Third, a greater percentage than ever before went on to college. The college population grew from 2.2 million to 7.4 million between 1950 and 1970 (U.S. Bureau of the Census 1984). Fourth, the birth control pill opened up the technological possibility of unleashed sexual activity. There were also unprecedented and unsettling historical and political conditions: the cold war; an apparently permanent military mobilization; the overhanging threat of the atomic bomb; McCarthyism and the virtual disappearance of the organized Left.

Alongside the prevailing youth culture of the 1950s, there were also minority subcultures living out one or another variety of alienation from the dominant culture. Small clusters of Bohemians—"Beats," many called themselves—inhabited low-rent districts and became alluring models for growing numbers of alienated adolescents, especially boys. They saw mainstream American society as an inhuman machinery forcing uniformity on the unwilling, substituting fraudulent amusements for deep pleasures, keeping sexual freedom bridled by family responsibilities. They were dissidents—rebels, though neither reformers

nor revolutionaries, for they had little interest in changing society. As with the Bohemians of the 19th century, art was their model for an unconfined existence; activity was undertaken for its own sake, not for extrinsic rewards. Many of them were writers, whence their success—whatever the disarray of their personal lives—in becoming famous role models for the next generation. They dabbled in Eastern religions, or what they took for such. And like the Bohemians of the nineteenth century they turned to drugs to heighten their senses. Their appetite for wine, marijuana, and amphetamines was prodigious. At times they couched their experiences with drugs in religious terms—drug use as an attempt to transcend the superficialities of everyday living, an attempt to reach the plane of the unspoken and eternal. Despite a hue and cry from the established media, the Beats were few, and their devoted readers, though more numerous and probably more influential, were still minorities (Polsky [1961] 1985).

There were ebbs and flows in the tone of the youth culture during the next decade. But by the mid-1960s, overall, the youth culture had taken on a stronger edge of generational rebellion. Styles that had flourished among a few thousand Beats became popularized and transmuted. Drugs spread rapidly. In a few years, drug use became common wherever youth congregated: first in colleges and urban youth enclaves, then in high schools and the armed forces. Drug use became defined by both users and antagonists as a component in a larger complex of political-cultural deviation. Drugs took their place in an ensemble of cultural practices in which the main elements were sexual promiscuity (made possible by the larger revolt against authority as well as by new birth control technology), political opposition (accelerated by the civil rights movement and the incipient movement against the Vietnam war), and cultural separatism (the hippie style of hair, clothes, language, and music).

Marijuana, previously used principally by Black and Hispanic youth and in small white enclaves, became the drug of choice among middle-class youth. LSD followed. A minority of those who indulged in marijuana and LSD moved on to more exotic psychedelics, cocaine, amphetamines, and new concoctions and combinations; a few tried heroin. Such drugs also spread among the demoralized troops in the armed services, especially in Vietnam, where they became endemic. Because the possessors of drugs were subject to severe legal penalties, the meaning of drugs crystallized as a badge of generational rebellion. New waves of young people then turned to drugs partly because they were reputed to be pleasurable, partly because they were readily available, partly because peer pressure made drug use a token of membership in the immediate group, and partly because drug use was understood by users and authorities alike as a sign of revolt, a port of entry into the larger subculture of opposition. Youth learned to associate drugs with pleasure (Becker 1963).

Although the drugs had intrinsic properties, the meanings associated with them (and thus the users' orientations to them) were not inherent in their

chemical contents. The meanings were created by the practitioners in a youth culture that was, in turn, situated in a larger culture. Motives were complicated, the meanings of drug use (to the user) varied. A thorough review of the literature on the multiplicity of motives and meanings among drug users is not possible here. But for present purposes, one distinction is particularly important. Although the possible orientations to drugs were not mutually exclusive—they could overlap for any particular user—it is possible to distinguish between two primary drug orientations in the United States of the 1960s and early 1970s: the "recreational" and the "transcendental." (Among American troops in Vietnam one would have to add a third: the "medicinal" or anesthetic.)

The recreational spirit was motivated primarily by a desire for sensory pleasure. It centered mainly on marijuana. Most likely the search for pleasure, plain and simple, was the principal motive that drew young people to marijuana in the 1960s. Marijuana was widely touted as an aid to heightening the senses. It was said to increase the enjoyment of music, food, and sex. For most users, it was confirmation and extension of youth's general commitment to hedonism. It was believed to be an easy route to satisfaction and an antidote to the sense of meaninglessness at a moment when it was common to feel, with the Rolling Stones, that "I can't get no satisfaction." In this sense marijuana was in the mainstream of consumer society—except that it was illegal. Along with the pursuit of individual satisfaction there were also more communal motives: the desire to participate in the collective ritual of smoking and to participate in the music and other accompaniments of the drug-based subculture. Again, because it was illegal, the smoking of marijuana acquired an ancillary meaning: it became an act of rebellion against the authorities who had made it illegal while their own intoxicating substance, alcohol, was legally sanctioned.

The transcendental orientation to drugs, by contrast, was an extension of the Beats' search for a metaphysical alternative to the commercialism, materialism, and rationalism of Western society—itself a renewal of the mid-19th-century transcendentalism of Ralph Waldo Emerson and Walt Whitman. Disgruntled with affluence and the "disenchantment of the world" characteristic of modern society (Weber [1915] 1946), a critical mass of the young began to look to drugs as spiritual conveyances. In this quest, the drug of choice was the extremely potent psychedelic LSD. Although its partisans often recommended the sensual as well as "mind-expanding" properties of LSD, the drug also lent itself to a quite different orientation: a spiritual quest for meaning. The discourse of LSD tended toward "God," "dissolution of self," and "discovery of existence." LSD and related drugs were thus part of the whole complex of meanings, symbols, and practices that came to be known as the hippie world or, later, the counterculture. The drug was the ideological centerpiece of this revolt against authority and materialism—against the values of consumer society itself.

Through the sensational accounts of the mass media, eager to tout cultural fashions, as well as the counterculture's own highly sensational underground press, the promoters of LSD found primarily among the young a growing audience for the message that the proper course of conduct was to "tune in, turn on, drop out." Promoted indiscriminately, distributed cheaply, and often given away or sold (sometimes in contaminated form) LSD induced a large number of disabling and quasi-psychotic experiences, some of them of extremely long duration. Popularization and sensationalist claims also helped convert LSD into precisely that which its original ideologues had insisted it was an alternative to: a commodity that promised "fast relief" from the burdens of everyday life.

As the counterculture lost its momentum, the point of taking the drug shifted from spiritual exploration to "getting high"—a chemical form of instant gratification, reproducing the larger culture's reliance on tranquilizers, alcohol, and other sanctioned drugs (Lee and Shlain 1985) LSD spread beyond its original circles of experimenters, and the spiritual motive tended to dwindle. Preparations for spiritual "trips" were sacrificed in favor of the secular casualness that attended a new form of intoxication. Despiritualized and (after 1966) illegalized, LSD took its place among other potent drugs—cocaine, amphetamines, barbiturates—to which young people resorted principally for recreation, relaxation, and escape and to which many became physiologically and psychologically addicted. Trying to get high, and avoiding the risk of psychedelic bad trips, a small percentage of hard-core drug users were even tempted to use opiates, whence still more psychological and physical addiction developed.

Countercultural motives persisted after the 1960s, but the counterculture foundered both from external pressures (above all, the end of the economic boom) and internal strains. With the end of the Vietnam war, the principal motive for youth alienation evaporated, along with one of the principal sites where drugs were distributed: American military bases in Vietnam. As political ideals subsided, so did aspirations for personal breakthroughs into transcendent realms. A growing experience and perception of the psychological dangers of drugs—even when drugs were used for transcendent purposes—also helped undermine the counterculture's utopian self-image. The transcendent state sometimes attained through LSD or mescaline could not be sustained; the search to continue it, and to find contact with a higher realm and a sense of integration denied in everyday life and drug experiences alike, led to a variety of mystical practices (Tipton 1982). Cultural rebellion was normalized and, in the process, flattened and contained. Much of the cultural opposition of the late 1970s and 1980s, associated with "punk" music and styles, was cynical or nihilistic and therefore by definition uninterested in transcendence. As a result of all these factors, the transcendental motive for drug use waned. According to a recent survey, the recreational purpose ("to have a good time with my friends") is the main one to have survived among youth into the 1980s; at least it is the

purpose most likely to be acknowledged. The second most frequently reported is to relax or relieve tension (NIDA 1986).

Obviously many factors bear on drug use among the young: the availability and cost of the drugs; the values associated with and against them; the desire to belong to a social group; the dangers believed to attach to the drugs; the sanctions brought to bear for illicit use; the availability of other, legitimate channels to satisfaction; and, of course, the larger cultural premium that is placed on personal satisfaction and chemical means. But it is a safe assumption that amid this constellation of factors, the desire for excitement, easy pleasure, and fast relief loom large.

Conceptualizing the Role of the Media

One way to summarize the argument to this point is to say that in many ways American culture is a drug culture. Through its normal routines it promotes not only the high-intensity consumption of commodities but also the idea that the self is realized through consumption. It is addicted to acquisition. It cultivates the pursuit of thrills; it elevates the pursuit of private pleasure to high standing; and, as part of this ensemble, it promotes the use of licit chemicals for stimulation, intoxication, and fast relief. The widespread use of licit drugs in America can be understood as part of this larger set of values and activities.

The part played by the mass media in contributing to drug use must be understood against this background. It would be wise to begin with a general caveat: the impact of any communications medium with respect to any particular social practice is complex, elusive, and difficult to separate from larger social processes. Research on the reception of media in natural settings is in an underdeveloped state, partly because it is intrinsically difficult to conduct and partly because attention and funding have been directed to the more manageable and apparently precise sorts of experimental and survey studies. It is difficult to generalize from experiments, and the results of surveys are often ambiguous. Discussions of the impact of the mass media often suffer from the assumptions that the media operate (1) directly, (2) independent of other social forces, and (3) on a passive population. This "hypodermic model" of all-powerful media injected into an all-accepting populace has been essentially discredited in modern media research (Gitlin 1978).

It is now generally accepted that the media tend to selectively amplify and reinforce tendencies that are already at work in the larger culture (e.g., Klapper 1960). In his chapter in this volume, George Gerbner has identified the obstacles that stand in the way of attributing precise social effects to precise media contents. But to put the matter this way is not to say media influences on social

problems are unimportant. In particular instances the process of amplification and reinforcement can be extremely influential.

It follows from the foregoing analysis that the mass media bear on drug use by the young in two quite different ways: (1) through their high-consumption, high-stimulus, sensational tenor, and (2) through their specific representations of drugs.

At the most general level, the media are showcases for a high-consumption way of life that is not easily within reach and the satisfactions of which are not manifest even for many of those who can afford them (Leiss 1976; Hirschman 1982). The up-tempo pacing and rapid montage of television and the movies generate a visual environment of constant stimulus; music videos carry this tendency to some logical extremity (Aufderheide 1987). Ubiquitous advertising, as well as the bulk of the material subsidized by advertising, promotes the indulgence of the self in a culture of thrills. Even television programs promoting their various versions of moral conduct take place in settings overflowing with consumer goods. Children's television is particularly devoted to a mix of simplified, kinetic, high-excitement programs and commercials for products that, if acquired, will presumably generate those thrills. There is no evidence that the overall panoply of sensational action and instant results is substantially diminished by the insertion of prosocial messages with which the television industry has sought to deflect criticism (Engelhardt 1987). In the context of a society that so deeply values material acquisition, television cultivates a thirst for goods. And yet, since means are limited and pleasures evanescent, television also helps generate appetites that cannot be fulfilled. American culture therefore opens up a gap between media-nourished expectations of gratification and experience that fails to meet them. One attempt to bridge that gap is drug use.

That television in particular should open up this gap between images and experience follows directly from its commercial basis. The fundamental objective of the network decisionmakers is to generate the largest possible audience of potential consumers for the satisfaction of the advertisers who finance the system (Brown 1971; Barnouw 1978; Gitlin 1983). Not since the early 1960s have individual advertisers made the essential decisions about prime-time programming; as the costs of advertising time rose steeply, few advertisers could afford to be the sole sponsors—and regulators—of a series. (Individual advertisers do, however, remain as sole sponsors of daytime serials and children's programs.) In prime time, the networks took over the position of making programming decisions that in effect catered to the marketing strategies of advertisers as a whole. Whether the advertisers have dominated directly or indirectly, their intentions have generated the atmosphere in which programming decisions are made. Increasingly, their considerations prevail on off-network cable channels as well. The privileged position of advertisers is

underwritten by tax law, which makes advertising a tax-deductible cost of doing business.

Although television decisionmakers are uncertain just how to maximize their share of the television audience, their general rule of thumb is that the programming of the past provides the most reliable guide to the programming of the present. The principal of minimizing risk accords a privileged position to production companies, producers, writers, and other personnel who have demonstrated strong commercial track records. Genres and styles are endlessly recycled, repeated, permuted, and recombined (Gitlin 1983). Because the high-stimulus, high-consumption brand of television has proved commercially successful, there is a strong compulsion to reproduce it. Generations reared according to these values naturally expect their media to harmonize with the consuming way of life they take for granted. Deviations from the conventions of commercial television are experienced as unpleasant, prove unpopular, and lead to people "freely" choosing the established forms. A sort of Gresham's law of television operates: programs that might be conducive to reflection or education tend to be driven out by the forms that "work". The growth of syndication and cable distribution does not alter this fundamental process; the cable networks that succeed best in the marketplace are the ones that give their audiences a specialized slice of network fare—sports, movies, old network entertainment. As long as television programming is driven by the fundamental motive of maximizing audience size in order to maximize profits, this Gresham's law will continue to operate.

The process is even more evident in motion pictures, where the constraining hand of censorship is absent and the emphasis on high-stimulus sensory bombardment and taken-for-granted consumption is commensurately stronger (Gitlin 1990; Miller 1990). Television styles of glamorized action and thrill-laden sensation have become more and more prominent in Hollywood movies as teenagers have become a growing percentage of the movie audience. The predominance of spectacular films in the mode of Steven Spielberg and George Lukas has in turn weakened the audience for films more conducive to reflection. I am arguing, in other words, that the prevailing priorities of television and motion pictures—regardless of the ways in which drugs as such are represented—cultivate expectations of sensory gratification that cannot be met in actual life, expectations that play a part in rendering drug use apparently sensible.

In this atmosphere, glamorous representations of drugs may well have an added effect of rendering drugs legitimate for some portion of the audience. Although NBC's "Miami Vice," for example, showed drug dealers to be involved in murder and other unsavory acts, the series routinely showed drugs (in particular, cocaine) to be an integral part of a way of life in which the fundamental activity was partying and the fundamental characteristic was glamor. (The

series is still seen in syndication although it ceased production in 1989.) In the media's general image bank, however, are an increasing number of dissenting notes suggesting that drugs, including alcohol, are dangerous. In recent years, some television producers have made a point of incorporating material to this effect. In 1981, for example, "Hill Street Blues" included an episode in which Detective LaRue's uncontrolled drinking had the effect of jeopardizing his partner's life and botching an important police operation. Captain Furillo insisted that LaRue get involved in Alcoholics Anonymous (AA). When LaRue did so, he discovered at the meeting none other than Furillo, himself a recovering alcoholic. Subsequent episodes casually established that it was legitimate for tough guys to order mineral water at a restaurant. Other characters periodically ordered alcohol but did not need to drink during their conversations. At one point Furillo, in marital trouble, resorted to drinking again. In short, alcohol was treated as a problem, not a costless social crutch. On "Cagney and Lacey," Sgt. Chris Cagney tried and failed to keep her alcoholic father from drinking, but he suffered from cirrhosis of the liver and eventually drank himself to death. Later, Sgt. Cagney recognized that she herself was an alcoholic and joined AA. The case of antialcohol messages being inserted in the "All My Children" soap opera is discussed in chapter 3. Because of the efforts of conscientious producers and aroused scholars, efforts to portray the effects of alcohol are on the increase. (For further examples, see Montgomery 1989, pp. 187–191.)

Such inserts counteract the sensationalism that, I have argued, is conducive to drug use. So do direct statements about the dangers of drugs, like the spot announcements in which celebrities (in particular sports heroes) urge the young to avoid drugs and other spots that try to warn potential users about the dangers of drug use. There is no way to assess the precise effects of such appeals, although it is reasonable to assume they do help retard the use of drugs, or at least dampen an increase in use that might otherwise take place. A systematic campaign of antismoking commercials in the late 1960s had a significant effect on encouraging smokers to try to quit (Whiteside 1970). Thoughtful presentation of antidrug appeals might well be of some avail, especially because many young people have direct experience of bad drug reactions and their stories circulate among their peers. Commercial broadcasters can be expected to resist Government pressures to carry messages strongly discouraging alcohol use, however. Beer and wine advertisers are important to the finances of commercial television, which is moreover loath to incur the precedent of devoting substantial time to noncommercial ends. Indeed, Montgomery (1989, pp. 190–191) argued that television's reforms in the representation of alcohol have had the effect of "protecting the industry from further regulation."

It is worth striving for such reforms, but there should be no illusions about what they can accomplish by themselves. Amid the media's steady, everyday appeal to instantaneous pleasure, there is reason for skepticism that occasional media appeals against drugs will have decisive effects unless they are accom-

panied by a concerted assault on the social and cultural conditions that stimulate drug use. The effects of such campaigns are not known and are probably not precisely knowable. There is danger, too, that blunt propaganda against the evils of drugs can backfire. One of the major drug dealers in Oakland, CA, once said the television program he had most enjoyed as a child was "The Untouchables"; a more fervent defense of law enforcement can hardly be imagined. Under conditions otherwise conducive to the flourishing of the drug distribution industry, blunt propaganda can, despite its intention, call attention to forbidden fruit.

In 1986 that same drug king, Felix Mitchel, was murdered in a fight at the Leavenworth Federal Penitentiary, where he was serving a life sentence without possibility of parole. The funeral procession, led by a gold and black horse-drawn carriage, attracted thousands of admirers to the Oakland streets (Marinucci and Gibbs 1986). "How did John Kennedy's family make their money?" said one youth to a reporter. "By bootlegging." As long as ghetto conditions are desperate—unemployment, poverty, welfare dependency, fatherless families—it is going to be hard to keep young men from admiring drug tycoons, however many murders they are responsible for. They are, after all, successful entrepreneurs who create jobs. In the ghetto, they monopolize the means to wealth.

With all the pressures that spread the use of drugs, not least the consumer culture that the mass media embody and amplify, direct media campaigns against drugs are preferable to a complete absence of antidrug messages. But the history of moral purification crusades in the United States suggests that a focus on media images alone is likely to have limited effects while generating excessive expectations. It is worthy of note that there are societies—the Soviet Union, for one—in which consumer satisfaction is widely disappointed and yet widespread alcoholism thrives without any advertising whatsoever. Still, in American society, the likelihood is that the direct and specific images of drugs, whether positive or negative, play an independent part in accelerating drug use, and that the impact of these images, although limited, is not negligible. As a site of possible intervention against dangerous drugs, the media deserve the closest possible public scrutiny.

Note

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CHAPTER 3

Stories That Hurt: Tobacco, Alcohol, and Other Drugs in the Mass Media

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In the major research this chapter summarizes, George Gerbner documents and quantifies the media environment Todd Gitlin described in Chapter 2 through a more theoretical approach. It is an environment pervaded by prodrug messages and economic influences that strongly favor the widespread purchase and use of legal drugs. It is also an environment, Gerbner points out, that has been difficult to regulate or control. Clearly, Gerbner concludes, the values of free enterprise and free speech are not always consistent with those of public health and AOD use prevention. Gerbner's synthesis of research on the interrelation of drugs and the mass media provides the touchstone for all the other chapters and offers insights into the behind-the-scenes conflicts underlying mass media messages about drugs.

Culture and Health

How well and how long Americans live are no longer questions of medicine or fate. Preventable illness and premature death are now end products of a complex manufacturing and marketing process.

Culturally supported habits of smoking, drinking, and other drug taking claim many more victims than any deficiency in medical care or delivery. Lifestyles sustained by mass media entertainment and advertising influence life expectancy much more than medical technology. Learned behavior patterns devastate many more lives than highly publicized chemical and physical risks. (The smoke from a single cigarette contains about 100 times more cyanide than did the two grapes from Chile that in the spring of 1989 triggered a panic and cost hundreds of millions of dollars in economic damage.)

The cultural-environmental front—stories we tell to millions—is the crucial new frontier in health promotion and disease prevention. This chapter is a report from that frontier.

Tobacco, alcohol, and other drugs touch people's lives in two ways. As substances they lend themselves to a broad range of uses and abuses. But as global industries they exert an even more pervasive influence. Through ownership, investment, and other controlling interests in many of the largest consumer industries, they command wide patronage of mass media.

The next section of this chapter surveys policies in the management and regulation of large systems of mass media images and messages about smoking, drinking, and drug taking. Subsequent sections discuss how media deal with each of these substances. The report concludes with a review of research about the depiction of these substances in advertising, entertainment, and news and the consequences of exposure to these messages.

This exploration is part of an emerging shift in public health policy. A growing awareness of threats from environmental, social, behavioral, and lifestyle factors, from chemical dependency to acquired immunodeficiency syndrome (AIDS), has led to a shift from mainly medical and epidemiological concerns to a broader concept of prevention. New targets of inquiry and action include pervasive systems of media messages and images supporting behavior patterns that hurt and kill thousands of Americans and devastate hundreds of families every day.

The broader policy concerns raise serious economic, legal, and political issues. There has been no comparable consideration of deeply rooted social and industrial practices since the legislative assault on what was then considered the most destructive drug: alcohol. Prohibition, the last gasp of the puritan ethic, was a largely moral and ultimately coercive attempt to assert values no longer salient to most Americans (see, e.g., Gusfield 1963). It showed that attempts to suppress behavior without also attending to its cultural roots drive production underground, finance criminal industries and fortunes, and push corruption deep into every community. The end of Prohibition marked the end of an era of illusions about laws and behavior.

The newly emerging trend draws on the authority of medical and social research. "We are not fighting sin. We are fighting disease," said a speaker for the American Medical Association (AMA) in proposing a cigarette advertising ban. A problem that must be confronted, however, is that such a disease is also an entrenched industry and a well-established social and cultural condition. Fighting drugs provokes powerful resistance and repressive politics. The end of the war on drugs may well be the end of another era of innocence about the stories we manufacture for all to grow on—the stories that heal and the stories that hurt.

Drugs in Society

Alcohol, tobacco, and other drugs of various kinds have a long history of remedial and ceremonial functions. Improvements in production and marketing, and the cultural changes we associate with the industrial and media revolutions, swept away most of the traditional controls of scarcity, custom, and ritual. Except where coherent ideological and other cultural (usually religious) rules inhibit or forbid their uses, many palliative and addictive substances have become commodities marketed to serve individual desires and institutional and geopolitical interests.

Tobacco's toll is higher than that of all other addictive drugs combined. About 57 million Americans are hooked on cigarettes. A thousand die of smoking-related illnesses every day. Alcoholics number some 18 million. Some 13 percent of adults are addicted to alcohol and 6 percent to illicit drugs. More than 10 million abuse tranquilizers and other psychotherapeutic drugs. More than 1 million each are hooked on crack, heroin, and hallucinogens like LSD and PCP. "Ice" (smokable speed) is likely to replace crack as the 1990's "drug of the year." About 550 people die every day of alcohol-related accidents and diseases and about 20 a day of overdose and drug-related homicides. Alcohol and illegal drugs are about equally involved in more than half of serious crimes.

Public concern about drugs is a result of many factors. Media attention may rise when a practice has passed its peak or fall while the practice is rising (see, e.g., Heath 1985). The ability of some groups to dramatize an issue, the media's need to attract large audiences, opportunities to mobilize constituencies around hot topics, and the use of the mass media to achieve long-sought (and often only loosely related) political objectives all contribute to trends in media content and to public perceptions and actions.

Societies have three basic ways of dealing with risky and addictive substances endemic in a culture. The first is to prohibit their production and distribution. Foolproof in theory, prohibition is the most difficult to effect against powerful global industries catering to ubiquitous demands. The second is to impose controls on weaker links in the chain. Consumers are urged to abstain from or limit consumption, to "just say no." The third way is to cut demand by addressing its cultural-environmental supports, especially the mass media.

The growing emphasis on the third line of attack marks a new social diagnosis. It focuses on the daily cultivation of appeals and associations that render the use of chemical substances compelling and resistant to change. It also attempts to find the least corrupting and coercive direction toward change.

A Historic Juncture

The shift from the traditional focus on mainly medical to broader cultural public health concerns became evident in the 1970s. It resulted from a combination of factors. One was medical success in controlling many infectious diseases; another was the recognition of environmental and behavioral sources of many new threats to health.

An influential staff paper by the Institute of Medicine of the National Academy of Sciences (Nightingale et al. 1978) and the 1979 Surgeon General's report on Health Promotion and Disease Prevention (U.S. Department of Health, Education, and Welfare 1979) signaled the shift. These reports focused on the far-reaching conclusion of many studies that failure to obtain adequate medical care is responsible for only some 10 percent of morbidity and mortality and that behavioral factors account for most of the rest.

Concern with mass media as a source of health-related messages was evident in the 1972 report of the Surgeon General's Advisory Committee on Television and Social Behavior. Its update 10 years later (NIMH 1982) also included studies on health and consumer behavior.

The use of alcohol, tobacco, and other drugs in the United States has shown a general decline since 1980. However, there has been a relative increase of drinking, smoking, and use of some drugs among groups of young people, women, and other minorities. The Report of the Secretary's Task Force on Black and Minority Health (DHHS 1985) pointed out that socially conditioned and self-inflicted damage hits hardest those least likely to seek out health information but most exposed to television advertising and entertainment.

The concept of stories that hurt challenges the constitutional distinction between speech and action. Speech and the press, even if hurtful or offensive, receive considerable protection under the first amendment. That protection is not absolute, however. The courts have been defining and refining, sometimes inconsistently, the permissible limitations on commercial speech compared to other expressions, on cameras and microphones compared to the printed press, and on recklessly false or willfully and demonstrably harmful communications.

The increasingly centralized management of the mass media creates conditions different from those envisaged by the framers of the first amendment. Cultural industries have become virtual private governments empowered to manage and control what the Constitution forbids public government to control. This development makes it necessary to consider new ways of realizing both the principles of the first amendment and the interests of public health under changing cultural circumstances.

Managing the Message

Tobacco, alcohol, and other addictive substances lend themselves to a variety of appeals that have, or can be made to have, powerful attractions. Advertising and promotion carry that power into visions of life far beyond the immediate reality of the substances themselves.

This section looks at the ways in which American society tries to promote, manage, control, and regulate these visions. Subsequent sections show how the media deal with each of the substances.

Stories That Sell

"Dare to Be More," declares a tall, bold young woman in pin-striped pants and a man's hat as she pulls a long, brown More cigarette from its pack. She pulls it with her teeth, lips widely parted, holding the pack gingerly in one hand. Her other hand rests in her pants pocket as she leans casually against a giant green More cigarette pack with two long, brown cigarettes sticking out. Her sidelong glance gazes defiantly into the reader's eyes, ignoring the small pale print under her booted feet that reads: "Surgeon General's Warning: Smoking by Pregnant Women May Result in Fetal Injury, Premature Birth, and Low Birth Weight."

On the other side of the same page of a typical newspaper supplement (*Philadelphia Inquirer*, November 23, 1986) is a two-page spread of a misty Christmas scene. Seven young people are sitting in a festive living room, glass in hand, roaring with laughter. Three open bottles are between them, and three as-yet unopened bottles are behind them. "Follow your instincts," the copy urges. "This year do it right." The advice is repeated on the bottom of the ad in large type beside another four bottles: "This year do it right. Seagram's."

Ads are stories about values and how to attain them. They are stories that sell. Selling involves the cultivation of identities, of assumptions, and of a sense that one is in need, even worthy, of what is being sold. Market researchers report that people with high self-esteem are good prospects for products that can make them feel good about themselves (*Advertising Age*, April 13, 1987).

Advertising is also a form of business patronage. Businesses subsidize commercial media by paying them to carry their sales and institutional messages and perform other services, including providing the editorial and program context most conducive to sales and other institutional objectives.

The subsidy comes from money added to the price of advertised products and passed on to media operators for their service. The consumer has little or no representation in or control over the process and no choice but to pay the levy,

irrespective of using or liking the media service. Although this practice is sometimes challenged as a form of taxation without representation, citizens pay when they wash, not when they watch (or read) media. The money goes through the seller of soap to the producer of the soap opera or other media product via payment for advertising time and space. The system is shored up by legislation (increasingly under attack) that makes advertising a tax-exempt business expense and thus fully available for commercial media support.

Government Regulation

The attractions of hedonism have historically been reserved for adults of the upper classes. The spread of popular media to all classes and ages raises fears of moral, social, and physical degradation among their elders and presumably betters. Media-fed anxieties also create political opportunities for interested groups to press for long-standing objectives. The complex regulatory context in which advertising and marketing operate on the Federal, State, and local levels reflects the history of these opportunities and objectives.

Federal and State Agencies

Congress has given the Federal Trade Commission (FTC) general authority to regulate deceptive or unfair business practices. The responsibility is shared with the Department of the Treasury in regard to alcohol advertising and the Food and Drug Administration (FDA) in the area of drug advertising. The U.S. Surgeon General and the DHHS services develop research and policy in public health and prevention.

The Federal Alcoholic Administration Act of 1935 gives the Department of the Treasury's Bureau of Alcohol, Tobacco, and Firearms (BATF) the specific responsibility for controlling false and misleading, as well as "obscene or indecent," statements in alcohol advertisements. BATF regulations demand disclosure of alcoholic content and quality in distilled spirits and prohibit "disparaging of a competitor's products." BATF regulations also control the use of athletes in ads.

BATF acts as a buffer between the industry and the public. When a proposed change in its advertising code evoked more than 10,000 letters asking for tighter restrictions, it expressed concern about beer advertising at sports and entertainment sites and the increasing number of brewery-sponsored activities on college campuses. But in 1986, instead of tightening the rules about drinking and sports, BATF relaxed them. Active athletes could be shown selling beer as long as they were not shown drinking it.

The affected industries usually respond positively to BATF concerns. For example, they agreed to abide by the wishes of college administrations regarding availability and promotion of beer on campuses. Also, the industries trust that

even if BATF loosens its rules, at least the networks will maintain the standards of advertising they need to fight off proposed bans on advertising (*Advertising Age*, Nov. 1, 1984).

State and local controls present a mixed picture. Tobacco sales to minors are prohibited in most States; use or possession is forbidden in 12. Smoking restrictions are in effect or proposed in at least half the States and more than 400 municipalities, including most large cities.

The affected industries resist extension of what they call State and local balkanization of controls. Practices differ even in States that set up their own liquor stores for beer, wine, and distilled spirits. For example, whereas the Pennsylvania system was set up to control the distribution of alcoholic beverages with a view to discouraging their use and consequently does not advertise, the New Hampshire system is run like a business. It spends more than $300,000 a year on advertising and is the State's biggest money-maker. Despite charging higher prices and having 12 times the population of New Hampshire, the Pennsylvania system yields only 4 times the revenue of New Hampshire's. Although charges of corruption have been made in both States, only the Pennsylvania system faces the prospect of abolition under the State's sunset law that requires periodic reauthorization of agencies. Consumer groups, unions, and the Pennsylvania Mothers Against Drunk Driving (MADD) oppose abolition as well as the alternative proposal to sell wine in grocery stores. Such a move would double the number of outlets and loosen the already strained enforcement of age and other controls.

Congress

The 21st amendment to the Constitution repealed Prohibition and left the decriminalized alcohol industry struggling under a patchwork of State regulations. Within 2 years Congress passed the Federal Alcoholic Administration Act. It remains virtually unchanged as the basic Federal statute under which the alcoholic beverage industry operates.

The act is intended to control unfair competition and regulate the production, labeling, and advertising of alcoholic beverages. The industry is happy with the law. It opposes changes, resists attempts at deregulation, and fears that tampering with the act will open a Pandora's box.

Consumer and other public demands represent a constant threat. The trade paper *Advertising Age* reported (Aug. 16, 1982) that in 4 years some 5,000 letters and 140 petitions were submitted to BATF objecting to images of athletes, youth, and success in alcohol ads and demanding the inclusion of information about risks or a total ban on alcohol advertising. The report added: "There are those who object to ads that show alcohol as socially acceptable. 'The industry loved that comment,' says one . . . specialist sarcastically" (p. M-26). A National Beer

Wholesalers Association representative said, "This law has never been amended, and the industry is very comfortable within its framework. Our concern is that if it is not enforced there could possibly be a return to the abuses that helped cause the Prohibition" (p. M-23).

Congress has also regulated the marketing of licit drugs and banned tobacco commercials from the air. New bills emerge in each session, submitted by legislators sympathetic to consumer issues. Typical bills include measures to require public service time for antidrug messages; require warnings on alcoholic advertising; ban beer and wine commercials; eliminate the tax deductibility of tobacco advertising; support State educational programs on drugs, smoking, and drinking; allow State attorneys general to sue national advertisers when Federal agencies fail to act; and limit cigarette ads to photos of the package that resemble tombstones (hence "tombstone advertising").

Vigorous industry and media opposition usually succeeds in delaying or diluting advertising control legislation. However, a law to include health warnings on alcoholic beverage containers went into effect in November 1989.

The Courts

Suing tobacco, alcohol, and drug companies for failure to provide sufficient warning about health hazards has been a long-standing and often fruitless practice. By 1985, however, changes in liability law and public attitudes had prompted a wave of lawsuits that made judicial history. That year the Boston-based Tobacco Product Liability Project was organized to help attorneys trade information about tobacco litigation.

The verdicts have been mixed. For example, federally mandated health warnings were held to protect the tobacco industry from claims that consumers were not adequately informed. Hosts were held liable for the alcohol-impaired driving accidents of their guests. A cigarette manufacturer was awarded $5 million in damages in a libel suit against CBS and a television commentator who cited an FTC staff report but failed to include a company disclaimer. On the other hand, another tobacco company was held partially liable in the death of a heavy smoker for not having warned her of the known danger of smoking—in fact, claiming in advertisements that cigarettes were not harmful—in the 1950s.

Tobacco company "issue advertising" (paid expression of opinion without naming a brand) was held protected under the first amendment. However, in a precedent-setting decision (*Posadas de Puerto Rico* v. *Tourism Co.*) the U.S. Supreme Court upheld a ban on advertising that need not be deceptive but may have "serious harmful effects." That ruling seemed to have far-reaching implications for the advertising of addictive substances. But the FTC interpreted it as requiring convincing empirical evidence that advertising alone significantly

contributes to abuse. That is a hard, if not impossible, test, as I shall discuss when considering problems of research on communication effects.

Changing Policies

The activism of the 1960s and early 1970s strengthened the hand of the FTC. It led to the adoption of such measures as the ban on broadcast cigarette advertising, warnings on ads for tobacco products, drug disclosure and labeling requirements, and the elimination of most hard liquor commercials from the airwaves.

The citizen movement for consumer protection and media reform was driven by concerns about health, children's programming, violence on the air, and other issues around which large constituencies could be mobilized. But it did not survive the 1970s. Its momentum was blunted by a distracting and ultimately failed attempt to rewrite the Communications Act of 1934 and by a successful industry counterattack claiming, among other things, that new communication technologies are changing the structure of the industry anyway. (The demise of the reform movement has been analyzed by Pertschuk [1982], Rowland [1983], and others.) A House Communications Subcommittee draft report calling for an investigation of the television networks' structure and an FTC proposal to regulate television advertising directed at children were defeated. The FTC was ridiculed by broadcasters as wanting to become a "national nanny" and accused of an "industry-wide witchhunt." Congress eventually curtailed its power to control unfair advertising practices on a national industrywide basis.

The now-defiant Television Code of the National Association of Broadcasters (NAB), which had included the "family viewing" policy, was attacked in court, prompting NAB to abandon it. Code administration was left to the networks and stations. The FTC, which had earlier used its authority to require health warnings in cigarette ads, refused to use it for alcohol advertising, finding in 1985 "no reliable basis on which to conclude that alcohol advertising significantly affects alcohol abuse" (FTC, news release, April 16, 1985).

In 1986 FTC Chairman Daniel Oliver announced his plan "'to do no harm' to the marketplace" (*Insight*, Dec. 8, 1986, p. 45). He came out against restrictions on cigarette advertising, sounding the new "information rationale" that such advertising contains information about tar, nicotine, and health hazards. "I think," he said, "it would be a mistake to deprive the consumer of his ability to acquire that useful information" (*Advertising Age*, Nov. 17, 1986). In addition to ignoring the fact that advertising depends on suppressing or subordinating unfavorable information, Oliver also abolished an independent source of information. He ordered the FTC to stop testing cigarettes—saving taxpayers, he declared, about $200,000 a year (*New York Times*, April 26, 1987).

Consumer groups worry about weaker FTC policies and reduced caseloads. The National Association of Consumer Agency Administrators foresaw an "explosion in unsubstantiated and fraudulent advertising" (*Advertising Age*, Dec. 15, 1986, p. 82). Some industry voices warn that weakening the FTC also reduces its power to protect them against advertising control measures by other agencies. When Oliver urged even the National Advertising Division (NAD) of the Council of Better Business Bureaus "to resist the temptation to overregulate," the advertising trade paper was moved to comment, "Now, the last thing the ad industry needs is for NAD to emulate the seemingly inactive FTC." It warned that, "dissatisfied with today's FTC, consumer activists are increasingly taking their complaints against national advertisers to a few receptive State attorneys general."

Industry Codes and Controls

Industry codes and controls develop in response to the threat or reality of official controls and against the background of industrial consolidation. The rising cost of advertising and the great advantages of added marketing muscle speed diversification and concentration of ownership in many industries. Tobacco, alcohol, and pharmaceutical conglomerates now own television stations and other media, popular soft drinks and food products, theme parks, and many other enterprises. They sponsor sports events, art exhibits, concerts, and youth magazines. Conglomerates like Philip Morris may acquire a beer giant like the Miller Brewing Co. or Coca–Cola may acquire The Wine Spectrum to further diversify and stabilize their markets and to extend them into newer areas. RJR Nabisco, one of the biggest conglomerates, spends more than $200 million in national broadcast media alone and sponsors about 60 events a year.

Trade associations and media groups develop advertising codes to balance competing demands of their client companies and to protect themselves from consumer pressure and outside regulation. Advertisers also depend on broadcasting network censors for dealing with consumer and competitor challenges.

NAD is another forum for complaints. If NAD fails to resolve a controversy, appeal can be made to the advertising industry's National Advertising Review Board (NARB). Many of the claims seem trivial, at least by outside standards.

In 1986, for example, of the 107 challenges resolved nearly half were by competitors. One of the more contentious appealed to NARB was the objection to the claim of a cigarette company that selling 25 cigarettes instead of the standard 20 in a pack constitutes a "free" offer of 5 cigarettes per pack. After extensive hearings and deliberations, the panel urged that the language be changed from "free" to "without extra charge." The advertiser accepted the verdict under protest.

Tobacco, Alcohol, and Other Drug Trade Codes

The Tobacco Institute, a trade association of U.S. cigarette manufacturers, established a cigarette advertising code in 1964 in a futile attempt to forestall the broadcast ban—and abandoned it in 1970 shortly before the congressional ban went into effect.

Industry representatives assert that they are observing principles of the code and that "no product advertising is held up to, or required to meet, more exacting and rigorous standards." They declare that cigarette marketers have limited the distribution of free samples, withdrawn members' advertising from college and university publications, discouraged the use of youth appeals or models under 25, agreed to the FTC's requirement of rotating warnings and disclosure of tar and nicotine information, and, faced with antismoking commercials on the airways, accepted legislation banning all tobacco advertising on radio and television (Kornegay 1986).

There was little indication, however, that the conclusions of a 1981 FTC report were no longer valid. The report found that, aside from accepting the inevitable, the short-lived code had had "little if any practical effect" (FTC 1981, p. 5–13). It did not affect the main themes of cigarette advertising, it failed to reflect voluntarily the findings of medical research, and it failed to discourage young people from starting to smoke. Promoting smoking as an "adult custom"—one that (the report pointed out) many young people wish to emulate—"does not qualify as discouragement" (p. 5–15).

Faced with the threat of legislation and litigation, the Distilled Spirits Council of the United States (DISCUS) approved its Code of Good Practice in 1983, which keeps its members from advertising alcoholic beverages on radio and television, in comics or religious or youth publications, on movie screens, and "in any manner directed or primarily intended to appeal to persons below the legal drinking age." DISCUS also "joined with government and civic groups in efforts to encourage moderate and responsible use."

The 1984 Brewing Industry Advertising Guidelines similarly discourage appeals to minors or to religious, scientific, or educational claims; the condoning of drunk driving, drunkenness in general, on-camera drinking, or "improperly" disparaging comparisons to competing beers; or association with illegal or disreputable circumstances. "Taverns or other places portrayed in beer advertisements should always be depicted as well-kept and respectable places," the code declares.

The Wine Institute's Code of Advertising Standards, adopted in 1978 by this trade association of California wine growers, stresses that "when subscribers to the code use wine advertising which visually depicts a scene or setting where wine is to be served, such advertising shall include foods. . . ." Excessive

drinking, loss of control, feats of daring, underage models or appeals, medicinal values, the use of athletes, and demeaning portrayals of any group are to be avoided. Attuned to the more mature sensibilities of their markets, winemakers urge depictions of "wholesome persons enjoying their lives and illustrating the role of wine in a mature life style." However, 40 percent of all wine sold in the United States is made by nonmember firms who are not bound even by these mild strictures.

In general, both the tobacco and the alcoholic beverage codes are voluntary in their application to trade association members, whose membership is also voluntary. They react to competitive complaints, or they are aimed at preventing the reality or threat of legal constraints. Although tobacco industry representatives complain of the administrative nightmare and complexities and burden of rotating warnings and claim that, with the possible exception of drugs, no lawful product is subject to more severe restrictions than tobacco products, the voluntary codes reflect mostly the experience of sound business practice. Only DISCUS discloses how the code review procedure handles complaints: the findings of a code review board of industry members "shall be communicated promptly to the responsible advertiser and in appropriate circumstances to all members of the Board of Directors of DISCUS."

More specific and less cozy is the code of the Proprietary Association, an organization of the nonprescription, over-the-counter (OTC) medicines industry. The Voluntary Codes and Guidelines of the OTC Medicines Industry is a comprehensive document dealing with packaging, labeling, disclosure of ingredients, and other aspects of merchandising as well as with advertising. First adopted in 1934 and revised and strengthened many times, this code reflects legislation as well as industry practice guiding the marketing of nonprescription drugs. In provisions resembling the tobacco and alcohol codes, it warns against appeals to youth, excessive and unsubstantiated claims, derogatory comparisons, on-camera ingestion of drugs, and the use of contests and prizes to stimulate unnecessary purchases. Going beyond these general provisions, the code also urges advertisers to comply with existing legislation, direct consumer attention to warnings and instructions on the label, represent accurately the findings of studies, and avoid testimonials by health professionals and others who are not bona fide users of the product.

Focusing more directly on cultural and behavioral factors, the code states: "Advertising of a proprietary medicine should avoid representations by word or picture which, in reasonable construction, are commonly associated with the 'drug culture' or which imply a casual attitude toward the use of drugs." Also: "A proprietary medicine should not be advertised in a manner which depicts consumers continually relying on medicines as simplistic solutions to emotional or mood problems." And: "Advertising of a calmative, sedative, or stimulant proprietary medicine should refer to the temporary nature of the relief provided

and should recommend the product for occasional use." The complaint procedure provides for appeal to NARB. It also notes that the resolution of complaints, as with all industry codes, is based on "past experience in evaluating advertising acceptability."

With the exception of appeals associated with drug-related complaints, industry code enforcement is sporadic, voluntary, and private. Firms that do not wish to comply may leave the association—and they often do. Neither compliance records nor studies of compliance nor even complaints are made public.

Violations of the spirit, if not the letter, of provisions of the code are evident to the casual observer. Complaints by business competitors are most likely to get a hearing. Marketing and promotional strategies that go beyond advertising (sponsoring sports teams and events, youth festivals, celebrity appearances, interviews, or contests) are exempt. Furthermore, messages embedded in entertainment and news even more frequently than in advertising may promote the same forbidden themes in more credible and less vulnerable ways.

Media Codes

Media codes of advertising and dramatic content reflect extensive experience with public, competitive, and legislative pressures. First developed in response to official censorship of movies and comics, they were elaborated and used by the licensed (and hence presumably vulnerable) industries of radio and television. When these industries became fully entrenched as private businesses, they were able to weaken the regulatory mechanisms that allowed some public representation in the conduct of business over the public airwaves. Eventually the codes were challenged in court and abandoned. Competitive pressures further eroded the standards developed over the first half-century of broadcasting, but some broadcasters claim that their principles are still being observed.

The now defunct NAB Television Code forbade the advertising of distilled spirits. The NAB code permitted the advertising of beer and wine "when presented in the best of good taste and discretion" and not consumed on camera. It cautioned against commercials that "convey the impression of, or appear to promote, excessive consumption of beer or wine" or "encourage use of these products by young people" or involve hazardous activities, athletic ability, sexual attractiveness, or mind alteration.

Network guidelines use similar language. The NBC Television Program Code adds, for example, that the use of alcoholic beverages "should not be portrayed as being necessary to maintain social status, obtain personal achievement, relieve stress, or solve personal problems." With respect to the more difficult problem of dramatic portrayals, the ABC guidelines urge avoidance of "glamorization" and suggest the occasional refusal of an alcoholic beverage.

Network advertising guidelines deal at length with OTC drugs. They urge factual presentations following label information, avoiding claims of mind alteration or non-habit-forming qualities, taking the medicine on camera, or overstating effects beyond symptomatic relief when clinically unsubstantiated.

The NBC code says that "narcotic addiction shall not be presented except as a destructive habit. The use of illegal drugs or the abuse of legal drugs shall not be encouraged or shown as socially acceptable." The code discourages claims of cures and the "indiscriminate use of such words as 'safe,' 'without risk,' [or] 'harmless' " when advertising medical products.

Other constraints on commercials include the fear of offending or interfering with sales by being too negative or downbeat. Paradoxically, these proscriptions affect antidrug public service messages more than drug or alcohol commercials (which are naturally upbeat). Conspicuous examples were a Brooke Shields appearance designed to discourage teenage smoking and a "smoking fetus" commercial targeted at pregnant mothers. Public service announcements "have to advocate the positive side of the issue; this did not," said an NBC executive (*Philadelphia Inquirer*, Jan. 18, 1985, p. 6-A).

Glimpses of how codes are administered have been offered by network executives when congressional committees have inquired into broadcasting policy and content. According to one such testimony, CBS censors reviewed a total of 873 television commercials for beer and wine in 1 year and rejected 20 percent. Among those rejected were a commercial showing two young couples on motorcycles equipped with six-packs and another using the line, "Don't sip—big swallows will empty your schooner sooner." (Alcoholism and Narcotics Subcommittee 1976, p. 202.)

On dramatic programs, network code administrators "are constantly alert to the kind of casual, gratuitous drinking that tends at times to be used as a quick and easy dramatic device." Among the examples offered in congressional testimony was this note to a producer: "Page 14. Phyllis' second speech. 'I think you need a drink.' Please rework this remark with special attention to the underscored word ['need']. We would like to avoid encouraging stress drinking" (Alcoholism and Narcotics Subcommittee 1976, pp. 20–22). The networks may once have been more vigilant than they are now. With the dismantling of the code administration in the late 1980s and layoffs of staff, the responsibility for program standards, if any, became dispersed and diluted.

The old Motion Picture Production Code advised that "the use of liquor in American life, when not required by the plot or for proper characterization, will not be shown." It also proscribed the portrayal of illegal drug use in detail or "in such a way as to stimulate curiosity." A number of powerful antidrug films such as "The Lost Weekend" and "The Man with the Golden Arm" hastened the demise of the code and its replacement in 1968 with the voluntary Classification

and Ratings Administration of the Motion Picture Association of America (MPAA).

Alcohol and drug usage "has been an important element considered by members of the rating board," said MPAA President Jack Valenti (1985), but it was not codified until 1986. At that time the film Classification and Ratings Administration began to apply no less a rating than PG-13 ("Parents strongly cautioned: some material may be inappropriate for children under 13") to any film that shows any use of drugs. However, it rejected demands for a new "SA" (substance abuse) rating to warn parents about features that "rationalize or glamorize the use of drugs," despite a study that found "at least 60 major features in which the use of illegal drugs was portrayed in a 'positive, upbeat way' " (*Variety*, Jan. 22, 1986, p. 1).

Managing the messages of tobacco, alcohol, and other drugs in the mass media is a complex system of legislative, judicial, and industry controls. On the whole, the system serves three major functions. The first and best developed is that of protecting business from any extension of existing constraints. Most laws and court decisions, hard fought though they may be at the time, come to be used as shields against further encroachments.

The second function is to adjust the rules of competition to fit the interests (and powers) of the major players and to protect their markets from invasion and erosion as long as possible. The third and most problematic function is to help adjust the images and messages to changing public sensibilities.

However, there is no reliable system of communication by which either public or private codes reach those who actually produce the ads, commercials, and programs. A pilot study of the application of existing guidelines to the making of beer commercials (Meister 1987) found that the producers of the commercials and even advertising agency account executives had little specific knowledge, if any, of laws and codes that presumably guide their work.

Network censors and NAD, NARB, and other review boards pay most attention to competitive complaints and demands for claim substantiation. The important claims from a public health point of view deal with lifestyle—the association of drugs with attractive living—and are rarely monitored or checked. In fact, there is no authority, public or private, that systematically monitors either compliance with or enforcement of the relevant laws or guidelines.

Tobacco

Tobacco is the most heavily promoted commercial product in America. It is also the most lethal. More than one out of seven deaths are smoking related. Smoking kills about 1,000 people a day, more than the number attributable to heroin, cocaine, alcohol, fires, car crashes, homicides, suicides, and AIDS combined.

Smoking costs the United States about $439 billion a year in medical expenses and lost workdays. Smoking one pack a day adds an average of 18 percent to a person's medical bills and cuts life expectancy 6 years (FTC 1981; *Advertising Age*, April 20, 1987; *Newsweek*, March 23, 1987).

In 1986 the World Health Organization (WHO) reported that the decreasing social acceptability of smoking in industrialized countries is offset by a "world pandemic" of smoking-related illnesses responsible for 1 million deaths a year, "fueled mainly by intensive and ruthless promotional campaigns on the part of the transnational tobacco companies" (*Philadelphia Inquirer*, Jan. 18, 1986; Development Forum, May 1987, p. 3).

By the late 1980s the proportion of men who smoked decreased from about half to less than one-third. But among women, young people, minorities, and people in many Third World countries, increases in smoking offset, or more than offset, any drops in smoking. Those who still smoke are generally the heaviest smokers.

The rising awareness of consequences and the emerging shift in health and cultural policy have increasingly troubled the tobacco industry. But the diversification and conglomeration of corporate structures infuse the industry with new financial resources, political clout, and cultural vigor.

Industry Power

The tobacco industry spends about $2.8 billion a year on advertising and promotion. It earns all levels of government $22 billion in taxes. Government subsidies to growers total considerably over $3 billion in loans and interest. With about $314 million for tobacco advertising paid to newspapers, tobacco companies are the largest national patron of the daily press (*Presstime*, April 1984). Tobacco is second to alcohol as the leading magazine advertiser. In fact, increases have been reported in magazine advertising for cigarettes, especially in magazines with mostly youth and women readerships.

The tobacco industry has used its power to impede the flow of information about the consequences of smoking—consequences known at least since 1938

when Raymond E. Pearl of Johns Hopkins University presented data on 6,813 men showing that smoking is associated with definite impairment of longevity.

An outpouring of studies and medical reports followed, confirming and elaborating the evidence linking smoking to cancer and other diseases. Few organs of the free press were free enough from advertising pressure to report the findings. George Seldes, muckraking writer and founder of the first publication devoted to press criticism (*In Fact*) gave information about this phenomenon to Secretary of the Interior Harold Ickes. On a broadcast of "Town Meeting of the Air" in 1939, Ickes discussed the suppression of research findings about smoking and cancer (Seldes 1987). That was the beginning of the anti-smoking movement.

It took many years for the movement to gather momentum in the face of industry obstruction and media complicity. The trial of Liggett Group Inc. for failure to advise of health risks before warning labels were required in 1966 provided detailed information about the strategies of tobacco companies in evading, denying, and combating health research findings throughout the 1940s and 1950s (*New York Times*, April 22, 1988). The companies responded to the early revelations by stepping up competitive health claims, introducing king-size and filtertipped brands, targeting young people and women, beefing up advertising budgets, and stimulating a sales boom that lasted with few interruptions until the early 1980s.

Glaring conflicts between increasingly rosy advertising and gloomy research findings prompted the FTC to publish its first tobacco order and report in 1942. Again, few newspapers published the conclusions. The crusading newsletter *In Fact* stated on May 8, 1950 (p. 4): "The daily press published news about the FTC order telling two of the five leading brands they were better than others, but 90 or 99 percent of the press of the nation suppressed every word of the same report confirming . . . that tobacco contains poisons and is harmful to almost everyone who uses it."

In Fact soon became a victim of the McCarthy era, but its revelations had to be countered. The counterattack began in 1954 with full-page ads in 448 newspapers announcing the formation of the Tobacco Industry Research Committee (TIRC) to combat the bad news. From then on, TIRC (later, the Tobacco Institute) publicists were cited in news stories in order to "balance" adverse information.

Among broadcasters only Edward R. Murrow (a chain-smoker who later succumbed to lung cancer) and other CBS public affairs programs under the direction of Fred W. Friendly gave the medical reports serious attention. TIRC objected that the programs were "unfairly edited" and alerted television reviewers around the country to protest them. (For a full account see *Columbia Journalism Review* 1963.)

Tobacco companies were reported to have pressured publications not to carry advertising for Bantron, a smoking deterrent (*Advertising Age*, April 6, 1959). When the *New York Times* decided not to accept cigarette ads unless they carried a health caution notice and tar and nicotine figures, the American Tobacco Co. pulled its ads from the *Times* and denounced the policy in full-page ads across the country as a "bum rap." A story on smoking regulations cost *Newsweek* its tobacco ads in that issue. *Mother Jones*, *Reader's Digest*, *Time*, *The New Republic*, *Psychology Today*, *Cosmopolitan*, and *Ms.* are among magazines reported to have had to censor articles dealing with smoking or suffer reprisals by tobacco companies—champions of a free press—for not doing so.

Smith's (1978) study demonstrated that magazines carrying growing amounts of cigarette advertising failed to print stories on tobacco's threat to health. Tsien's (1979) trend study showed that when the number of cigarette ads in news magazines increased (after the ban on cigarette commercials on television), the number of news items and editorials on health problems decreased. Furthermore, news reports on the adverse health effects of smoking were usually countered by arguments from the tobacco industry. This application of the journalistic practice of "balance" tended to neutralize and undermine the conclusions of research.

Perry's (1982) survey of studies also observed "a disturbing connection between cigarette advertising and the frequency and accuracy of articles about smoking." Weis and Burke's (1963, p. 4) study of tobacco marketing strategies concluded with classic understatement: "The tobacco industry has a history of exerting financial pressure on publishers to suppress the printing of information which would impair tobacco sales."

The Weis and Burke study also pointed out that "one reason editors give for the lack of media coverage of smoking is that health effects from smoking are not 'newsworthy.'" Other studies of news reporting reflect this reluctance to assign much "news value" to information about smoking. Freimuth and others (1984) found that cigarette smoking, the major controllable cause of cancer, was discussed in only 7 percent of news stories that focused on causes of cancer. A frequent event that is rarely reported is de facto not newsworthy.

Through their control or ownership of companies marketing food, drinks, other heavily advertised products, and even a major television network, tobacco conglomerates exert influence far beyond their own ads or even the print and broadcast media. Outdoor advertisers are reluctant to carry antismoking messages because they are dependent for up to half their revenue on tobacco companies and tobacco-owned soft drink and alcohol conglomerates. One of the largest billboard, airport display, and radio-television firms in the country, Ackerley Communications, is reported to have refused to sell billboard space to the American Cancer Society for any message at all, not even to "Fight cancer."

The company also ordered its other divisions to reject public service announcements for the American Heart Association and other antismoking organizations (Weis and Burke 1986).

Industry power was able to delay for decades—and is still able to obscure and dilute—the full impact of research vital to the Nation's health.

The Broadcast Ban

Cigarette advertising has concerned the FTC since the 1930s, when it sought to prevent companies from claiming health benefits from smoking. There was little evidence to counter these claims until the first major experiment in 1938. But during a subsequent 15-year period the FTC issued only seven cease and desist orders to eliminate various false claims.

Following the 1964 Report on Smoking and Health by the Advisory Committee to the U.S. Surgeon General, and after a long campaign by health education and consumer activists, the FTC concluded that cigarette advertising that failed to disclose the health risks of smoking was "unfair and deceptive." It proposed requiring clear and prominent disclosure of cancer and other hazards on cigarette packs and ads. An alarmed tobacco industry put its first advertising code in place and appealed to Congress for protection. In 1965 Congress preempted the FTC by enacting legislation with a milder and less prominent warning. But Action on Smoking and Health Executive Director John F. Banzhaf III and other consumer advocates used the Federal Communications Commission's (FCC's) "fairness doctrine" to force broadcasters to carry antismoking countercommercials. As cigarette sales began to slide, the tobacco industry dropped its code and, in the words of the chair of the Tobacco Institute, "offered to discontinue all advertising on radio and television." Congress passed the cigarette ban in 1970, "accepting that offer" (Kornegay 1986). The ban also drove countercommercials from the air.

Contrary to dire predictions, neither broadcasters nor the industry suffered from the ban. Other advertisers quickly filled the gap, and commercial time rates continued to rise in a sellers' market. Tobacco ad budgets zoomed fivefold, and tobacco advertising in magazines more than doubled. Women's magazines increased the most: tripling the ad space in *Redbook*, and sixfold in *Woman's Day* (Feinberg 1971). Cigarette sales resumed their rise. *Broadcasting* magazine (Jan. 16, 1971, p. 82) could not help noting with considerable sarcasm "that the newspapers and magazines that were most vocal in promoting the broadcast ban are carrying all the cigarette advertising they can sell, and staying silent editorially on their own role in the increase in cigarette consumption."

The tobacco industry counterattack rolled on with new brands, new marketing targets, and new campaigns. "Cigaret Men, Happy Despite No TV Ads, Roll Out New Wares" announced the front-page lead headline in *Advertising Age*

(Nov. 15, 1971). The now notorious female- and minority-oriented campaigns were born. American Brands launched Silva Thins, a cigarette for women, with a macho television commercial. It caused an uproar but gave John Landry, Philip Morris's marketing chief, the idea that led to Virginia Slims and "You've come a long way, baby!"

A full-page *Ebony* ad (June 1972) featured the large bold title "This Is L&M—Super Bad" over an intimate, happy, racy scene at a cozy dining table. "Her pad. Ribs and a good rap topped off with sweet potato pie and coffee—you can't take another bite. And now—you're both ripe for L&M," said the blurb. The health warning was not yet in place.

While cigarette sales in the female and minority markets continued to rise, tobacco sponsorship of youth-oriented sports and other broadcast programs came to an end. In a parting gesture to viewers, Philip Morris Companies, Inc., bought television time on all 1971 New Year's football games at a cost of $1.25 million. In the words of a network representative, the company wished to give America's youth one last video "farewell to Marlboro Country, Winston's bad grammar, the disadvantages of Benson & Hedges and to all those idyllic scenes of springtime and cattle roundups and menthol-cooled mountain vistas" (*Philadelphia Inquirer*, Jan. 1, 1971, pp. 1, 6).

Government Ambivalence

In 1978 the Secretary of the Department of Health, Education, and Welfare (HEW) proposed a modest Government campaign to discourage smoking. He was attacked by the Tobacco Institute for "Big Brother tactics" (*Advertising Age*, Oct. 9, 1978, p. 80), a "prohibitionist mentality" (*Newsweek*, Jan. 30, 1978, p. 73), and a "frenzied dictatorial effort" (*Broadcasting*, Oct. 9, 1978, p. 51). He was undercut by presidential assurances to the tobacco industry that "we have only a $30 million budget on tobacco at HEW. That is all Joe Califano asked for, and I think that's what he will get." Two-thirds of that was going for research, President Carter explained to a North Carolina audience of tobacco growers: "Tobacco, in some instances, is damaging to our nation's health, particularly among very young children and those who have respiratory diseases . . . . Certainly no one need fear the emphasis on research that will make the use of tobacco in the future even more safe than it has been in the past." The story that reported the speech was headlined "HEW's Cigarette Battle Goes Up In Smoke" (*Philadelphia Inquirer*, Oct. 17, 1978, p. 6-A).

It had been estimated that 1 year's Government funding for education about smoking was less than 1 day's cost of cigarette advertising (*Christian Science Monitor*, April 1, 1975). As the HEW campaign was getting under way, the program aimed at teenagers was cut and its director resigned in protest.

Antismoking drive keeps gaining, but impetus seems to have slowed was the *New York Times* headline on Jan. 26, 1979 (p. A-8). The story reported that although most States had approved some restrictions, only Minnesota had passed a comprehensive Clean Indoor Air Act. The tobacco companies spent 10 times as much as their proponents, defeating, or at least delaying for a decade, the next major threat, a California proposition that would have banned smoking in most public places. The campaign was repeated in Florida, with the same effect.

The FTC's staff report of 1981 (FTC 1981) found surprisingly low public awareness of the hazards of smoking. The report noted the increasingly shocking revelations about these hazards even for nonsmokers and demonstrated the ineffectiveness of existing health warnings in the face of tobacco advertising and marketing techniques. It recommended remedial action including expanded educational efforts; prime-time antismoking announcements; making health warnings larger, more prominent, and more specific, including disclosure of carbon monoxide levels; limiting the use of nature, health, glamor, and success imagery to what the trade calls "tombstone" ads showing packs only; and replacement of the current warning with a rotational warning system.

Congress has implemented only the last recommendation. The others are as valid for the 1990s as they were for the 1980s.

Advertising Campaigns

Cigarette manufacturers continue to associate their products with images of nature, beauty, sports, health, and vigor, but they can no longer claim explicitly that smoking is beneficial for people. The emerging shift in public health policy and the increasingly militant assertion of the private right to health have put the industry on the defensive. It is a robust defense, marked by counterattacks and victories as well as defeats and strategic retreats.

Issue Advertising

The formation of the TIRC triggered the first high-powered campaign to counter the findings of medical research. It was also the beginning of the long and successful drive to shield tobacco company disputation of research findings as "issue advertising," which is more fully protected than product advertising.

In full-page ads in January 1954 titled "A Frank Statement to Cigarette Smokers," TIRC pledged to contribute to research "into all phases of tobacco use and health" under the guidance of an advisory committee of "distinguished men" who were "disinterested in the cigarette industry." The Hill and Knowlton public relations agency, which created and managed the tobacco industry campaign, was credited with "brilliant inspiration in rescuing the cigarette industry from the most damaging assault it has ever sustained" (Galbraith 1960, p. 42).

Individual tobacco companies attacked the problem of research about tobacco's toxic elements and health hazards in various ways. "The public can choose with confidence" declared a Liggett & Meyers ad, citing tests with "a half-million dollar, 30-ton machine" and unnamed "eminent scientists from leading universities." The carefully crafted copy went on to describe "the most exacting scrutiny, including thousands of analyses of millions of pounds of tobacco. From all these thousands of analyses, and other findings reported in the leading medical journals, our Research Department has found no reason to believe that the isolation and elimination of any element native to cigarette tobaccos today would improve smoking." This blatantly disingenuous "finding" led to the conclusion that, therefore, you can choose with confidence the three Liggett & Myers brands "tested and approved by 30 years of scientific tobacco research."

The long-running Vantage brand campaign was even bolder. It featured confident, sincere-looking women and men representing "us" in heroic battle against "them." "They" are "those people who are always knocking cigarettes," "always telling us not to smoke," who "make me feel guilty." "They" are also extolling the virtues of the "low 'tar' and nicotine cigarettes" ("a lost cause," "like . . . sucking on a pencil," "as much flavor . . . as a toothpick"). "We" are different. "I smoke because I enjoy it;" "I love them;" "I am smoking Vantage."

As findings of indirect hazards from cigarette smoke in public places and work settings began to appear, and as studies showed the effectiveness of smoking restrictions, the R.J. Reynolds Tobacco Co. (now the RJR Nabisco conglomerate, makers of Vantage, More, and other brands) launched an issue advertising campaign that made legal history.

RJR placed full-page ads in leading newspapers and magazines that declared: "Workplace Smoking Restrictions: A Trend That Never Was" and "Passive Smoking: An Active Controversy." One ad told about a survey conducted for the Tobacco Institute that found most companies had no smoking restrictions (in 1985) and preferred "to encourage individual workers to settle smoking issues with mutual respect for each others' legitimate rights and feelings." The other reported that "the connection between [environmental tobacco smoke] and lung cancer has not been scientifically established to date" and complained that "one-sided coverage" leads to "growing alarm . . . being translated into social strife and unfair antismoker legislation."

When another ad titled "Of Cigarettes and Science" declared "the issue between smoking and health is an open one," the FTC finally issued a complaint. It claimed that R.J. Reynolds understated the risks of smoking and the ad was, therefore, false and misleading. Reynolds appealed, and in August 1986 an administrative law judge ruled that the ad was an expression of corporate opinion, not sales talk, and was thus outside FTC jurisdiction (*New York Times*,

August 7, 1986, p. A10). The attorney for the FTC argued: "Reynolds is free to speak on this issue . . . before the legislature, in news stories, op-ed pieces and scientific journals, and it can advertise truthfully. But it may not make deceptive statements in paid-for advertising to minimize consumers' fear about this most salient product attribute of cigarettes."

Advertising Age, however, was quick to point out in its headline that "RJR Ruling May 'Open Up' Issue Advertising." Industry representatives were cited as saying the ruling "gives advertisers the opportunity to get their story out to the public on controversial issues"—as, for example a beer marketer "placing ads arguing for a drinking age of 18"— (*Advertising Age*, August 18, 1986, pp. 6, 77).

Winning the legal battle on issue advertising provided a basis for pressing forward with a new defense of product advertising. The new campaign set out to join the cause of tobacco with that of civil rights and freedom itself. The industry with a long history of pressure and suppression now claimed that it was victimized by zealots, bigots, and other enemies of liberty.

Free Speech Campaigns

"The Most Inflammatory Question of Our Time," according to the headline of a full-page Reynolds ad, was " 'Hey, would you put out that cigarette?' " The ad went on to observe that such a question threatens smokers, creates social discord, and "can make sparks fly." This plea for tolerance concluded by suggesting that learning "peaceful coexistence" with smokers may also be the way to solve "our many other problems" (*New York Times*, Sept. 10, 1985, p. A-15).

Other ads went further. Some printed an article "presented in the public interest by Philip Morris, Incorporated." It began:

> The civil rights act, the voting rights act and a host of antidiscrimination laws notwithstanding, millions of Americans are still forced to sit in the back of planes, trains and buses. Many more are subject to segregation in public places. Some are even denied housing and employment: victims of an alarming—yet socially acceptable—public hostility. This new form of discrimination is based on smoking behavior. If you happen to enjoy a cigarette, you are the potential target of violent antismokers and overzealous public enforcers determined to force their beliefs on the rest of society (*New York Times*, Dec. 29, 1984).

"Free Speech Is Under Assault" claimed a sympathetic Mobil ad on the op-ed page of the *New York Times* (Dec. 18, 1986). "Censorship? Here in the USA?" asked a followup to the Philip Morris civil rights ad. According to the copy, "The issue is not smoking. The issue is simply the abuse of a constitutional right by a few who would obstruct the flow of information in an attempt to bend human behavior to match their notion of the ideal, their concept of the acceptable."

The censorship ad was also the opening gun in a $15,000 Philip Morris magazine essay competition for the best essay that, in the words of the sponsors, "defines and defends the First Amendment's application to American business; and that specifically questions the ramifications of a tobacco advertising ban on the future of free expression in a free market economy."

The announcement was sent to journalism schools across the country along with a large poster asking in bold type, "Is Liberty Worth Writing For?" over an enlarged facsimile of the first amendment. "Our founders thought so. And we think so too," declared the sponsors, explaining that the struggle for freedom leads directly to the fight against "a tobacco advertising ban now under consideration in Congress."

That struggle also involved a broadly orchestrated campaign to depict regulation of cigarette advertising as a threat to free speech and "consumer sovereignty." A friendly Congressman, Thomas Luken (D-OH), chair of the subcommittee that oversees the FTC, warned that even though "tobacco is a harmful product . . . imposing restrictions on its promotion and advertising constitutes a precedent which is bound to be imitated. Censorship is contagious."

Daniel Oliver, chair of the FTC, charged by law to oversee advertising, went further. Identifying a cigarette advertising ban bill as an "attack on consumer sovereignty itself," Oliver told a meeting of advertising executives, "Your industry will be the battlefield." Alluding to the campaign that defeated the move by an earlier and more active FTC to regulate children's television commercials, he said, "The enemy is worse than the National Nanny. It is Big Brother who is now stalking consumers" (*Advertising Age*, April 13, 1987, pp. 18-19).

At about the same time, *Newsweek* columnist Robert J. Samuelson complained that "the assault on smoking" aims to "breed intolerance and alter behavior." In an issue (March 23, 1987) that carried six pages of tobacco and alcohol advertisements, Samuelson developed an admittedly convoluted line of argument. Banning cigarette advertising, he wrote,

> is especially undesirable because, paradoxically, it may be allowed by the Constitution. In 1986 the Supreme Court ruled that Puerto Rico could ban advertising for gambling, which, though legal, was considered "harmful." If this precedent survives, all that prevents Congress—and State legislatures and city councils—from stopping advertising of "harmful" products is custom and good sense. Abolishing cigarette ads would loosen this self-restraint. Would alcohol be next . . . ?

It was clear that the ultimate goal of the "issue advertising" and "free speech" campaigns was protection of the cigarette sales pitch—and any sales pitch—from further restrictions, taxation, or outright bans. The campaigns could not halt moves to restrict smoking in many public and working spaces. But they succeeded in deflecting the national media spotlight from America's foremost

health hazard and in defeating, diluting, or delaying every major attempt to blunt, let alone ban, the tobacco industry's power to fill print and outdoor media with lively images of rugged, happy, attractive, healthy smokers.

Legislative Attempts

Medical and public health organizations have long argued that it is incongruous to have the Government spend billions of dollars on antidrug drives, cancer research, and other health campaigns while promoting tobacco through subsidies to growers and tax exemptions for cigarette advertising. Bills trying to address such anomalies have regularly stalled in Congress, however.

Antismoking Bills

The AMA, the American Lung Association, and the American Cancer Society have been among prominent organizations calling for the elimination of tobacco product advertising and promotion, especially cigarette company sponsorship of sports and cultural events that attract young people. As a first step, they recommended the elimination of glamorous models, joyous social occasions, and robust scenes set against beautiful natural scenery. Only the brand name, tar and nicotine content, and the health warning would be left in the cigarette ads.

The tobacco companies' standard retort is that (1) advertising is addressed to smokers only, (2) it may affect brand choice but not total consumption, and (3) any restriction violates their right of free speech (see, e.g., *New York Times*, March 14, 1986, p. B-5).

The print media position was stated in a joint letter by the American Newspaper Publishers Association and the Magazine Publishers Association to the AMA. It presented a fourth major argument: "Products that can be legally sold in our society are entitled to be advertised; if it is legal to sell a product, it should be legal to advertise it" (*Philadelphia Inquirer*, Dec. 11, 1985, p. 3-A).

The day after the Virginia Slims tennis tournament opened in January 1985 in Washington, DC, the Coalition on Smoking and Health, an umbrella group of antitobacco forces, asked Congress to "rid the U.S. of smoking and tobacco use by the year 2000." *Advertising Age* complained (January 10, 1985, p. 52) that the coalition "singled out cigarette and smokeless tobacco advertising and promotion for the criticism frequently heaped on beer and wine marketers—that they use rock concerts, sporting events and other appealing settings to target America's youth."

Congress has, in fact, considered bills to restrict or ban cigarette advertising, to eliminate its full tax deductibility, to require counteradvertising, and to restrict ads to "tombstone" messages without lifestyle images. Proponents of this measure argue that advertising promotes all consumption, not just brand

loyalty; that it is aimed at young people; that it is deceptive by failing to fully explain health hazards; and that the industry's advertising budget clout is used to suppress or neutralize adverse information. Opponents claim free speech protection and lack of evidence of harm from advertising; they say that bans—increasingly used to control smoking in other countries—don't work.

The administration, after some hesitation, permitted Surgeon General C. Everett Koop to testify for the ban in 1986, but the Government's own spokesman came out against it. "Deregulation" was the policy line. While the politically more appealing antidrug bandwagon rolled into high gear, congressional support for cigarette advertising control wavered.

The Political Economy of Tobacco

Surgeon General Koop repeated his call for the ban at a meeting held in the first Non-Smokers Inn (a Dallas, TX, motel). "But," he added, "don't anyone weep over the future of American cigarette manufacturers, because they are exporting disease, disability and death to the Third World as fast as they can" (*Philadelphia Inquirer*, March 29, 1987, p. 1-A).

The tobacco companies need not be worried. The business has never been more powerful, concentrated, prolific, or profitable. By the end of the 1980s six leading companies were selling more than 280 brands and filling nearly all the demands of about 50 million adult cigarette smokers. "Cigarettes are a fantastic cash cow," said industry analyst John C. Maxwell, Jr., adding that the financial condition of the tobacco companies is also "fantastic . . . . Philip Morris and Reynolds are throwing off almost $2.5 billion in [uncommitted] cash this year" (*Advertising Age*, August 4, 1986).

Cigarette income enabled R.J. Reynolds to acquire Nabisco, Del Monte, and Hawaiian Punch; Philip Morris to buy Miller Beer, Seven Up, and General Foods; American Brands to absorb companies from Pinkerton guards to sporting goods makers. Lorillard, Inc., profits helped Loews Corporation buy a controlling share of CBS, Inc.

Advertising Age (Aug. 4, 1986) reported that tobacco executives felt they had enough muscle to defeat most bills to ban advertising at home and abroad. Even those that passed would only consolidate the position of the leaders by making it difficult to introduce a new brand. They were "not in a panic over the fact that sales are sliding 1% to 2% per year, or over various moves to further curtail tobacco usage in the U.S.," the report noted. "There are about 940 to 950 packages of cigarets sold in this country every second of every day around the clock," said the president of Loews Corporation's Lorillard unit. "If it declines to 936, that's fine. If it declines to 932, that's fine too."

Media Clout

Legal clout has gained the industry the right to cloud the issues with issue advertising. Media clout has given it the power to continue to push tobacco advertising as free speech and to obscure or obstruct attempts at controls.

While the antidrug campaign of 1986 reached a fever pitch, attempts to publicize the Tenth Annual Great American Smokeout had a mixed reception. Few of the major media gave it much play. Most of those that did greeted it with derision and ran tobacco industry countercopy.

"Pre-Smokeout Philip Morris Passes Out 'Smokers' Kits' " was the banner headline over a story detailing the company's "big budget pre-emptive strike" and 13-city news conference via satellite hookup, complete with Milton Berle, "who asked nonsmokers to 'lighten up and let us smokers light up. We'd all get along a lot better' " (*Philadelphia Inquirer*, Nov. 20, 1986, p. B-9). An Associated Press story used the occasion of the smokeout to announce that a Tobacco Institute survey had "found that 72 percent of the 500 people polled said they believed money spent to promote the smokeout could be better spent on cancer research."

The *New York Times* sent a reporter to Winston-Salem, NC, to report, "Smoking drive feeble in the tobacco capital." A companion story was headlined "Smokers Trying To Cut Back Inhale Deeper, Study Shows" (Nov. 20, 1986, p. A-10). When WHO declared its headquarters a no-smoking area, a *Times* story stressed the "mixed response" and cited heavy smokers' comments in a dispatch from Geneva headlined "Guardians of world health find it hard to quit smoking."

Tobacco power still packs a strong media punch. If not constrained, it can continue to inflict huge economic losses on countries rich and poor and to devastate the world's youngest and most vulnerable populations for a long time to come. The early 1990 defeat of RJR Nabisco's effort to introduce a new brand targeted specifically at upper-income Blacks suggests that the fortunes of the tobacco companies may be changing; public opinion is hardening in opposition. Nevertheless, the tobacco industry remains a formidable presence in our life and culture.

Alcohol

Alcoholic beverages are the most widely used, enjoyed, and abused addictive substances in America. Although they exact 1 1/2 times the health cost and 3 times the economic damage of tobacco, their lethal toll is more concentrated. Five percent of the drinkers consume 50 percent of all alcoholic beverages and inflict on themselves and others 1 in every 12 fatalities, or an average of more than 570 deaths a day.

The cost in lives, health problems, troubled families, and economic problems has made Demon Rum a perennial moral and political issue. It precipitated the most radical social intervention in America's habits: Prohibition. Some claim that Prohibition had health benefits, but no one denies that it was a moral and political disaster. In the light of new wars on drugs and the industry argument that the only legal way to ban advertising is to make the product illegal (a claim the Posadas decision, upholding a ban on advertising that may have serious harmful effects, made somewhat disingenuous), the lessons of Prohibition may be instructive.

The National Prohibition Enforcement Act of 1919 and the 18th amendment to the U.S. Constitution (1919–1933) were adopted after many years of agitation and public discussion, and against determined opposition. Large majorities in Congress voted for the amendment. More States ratified it than any other amendment—46 of the 48.

Giant industries, a booming international trade, and thousands of saloonkeepers were outlawed without compensation. New enforcement agencies were created, and drastic police powers (including car searches without a warrant) were upheld in the courts. Treaties with other countries were signed to help prevent smuggling. Convictions rose from nearly 18,000 in the first year of prohibition to 53,000 the last. Various studies claimed overall productivity and health benefits. The battle for morality, sobriety, and industry seemed to have been won.

As time went on, there were reports of more drinking by young people than before Prohibition. Widespread smuggling, overcrowded jails, jammed courts, and the activities of underground empires flaunting the law grabbed the headlines. Moral issues were submerged in a storm of indignation and resentment directed against lawlessness and corruption. A review of research by the Federal Council of Churches (1925) hinted at the absence of cultural supports for Prohibition when it concluded that "the illicit liquor traffic will be finally overcome when and where education in temperate living strongly reinforces the arm of the law" (p. 83).

Historian W.E. Woodward summed up the "colossal failures" of Prohibition by observing that it had simply turned the liquor business over to bootleggers.

> They sold liquor poor in quality and high in price, and they paid no taxes. The enormous revenue of the government from the excise tax in liquor vanished in a day. That meant an inevitable increase in the income tax and in the tariff . . . . Although thousands of enforcement officers were employed, the illicit liquor business continued to grow . . . . All the preprohibition evils of liquor persisted, and were worse than ever, because they were beyond government control. (Woodward 1938, p. 781)

When the Great Depression wiped out any economic benefit of Prohibition and boosted demands for jobs and revenue, the 18th amendment was repealed. All limitations, including controls on quality, marketing, price, and age, were passed on to a patchwork of liquor laws and regulations. Former bootleggers emerged as leading industrialists. The profits and power of alcohol regained legal control of a significant segment of media culture.

Industry Under Pressure

The alcoholic beverage industry, a $1.3-billion-a-year advertiser, pays 4 to 5 percent of the total cost of U.S. commercial media. More than half goes to television for beer and wine commercials. Some 18 percent goes to magazines, 8 percent to newspapers, and the rest to outdoor, cable, and other media. Today the industry is at a crossroads. The boom in the sale of distilled spirits shifted into reverse in the 1980s. The beer market, growing at the rate of 3 to 4 percent a year in the 1960s (when the baby boom generation reached drinking age), went flat in the 1980s. And the wine boom of the 1970s and early 1980s, riding the crest of a demographic and lifestyle swell, began to fade.

Many pressures contribute to a shift in drinking habits and sales. Health and calorie consciousness, the graying of the prime beer-drinking population, the substitution of wine for distilled spirits, the raising of the drinking age in many States, the bans on happy hours, the rising concern about drinking on campus and in the workplace, warning signs in many liquor stores, and lawsuits making the server legally responsible—all contributed to a change in the social climate of drinking. The Federal excise tax, lowered to give industry a boost, rose by 19 percent in 1985. State taxes followed suit. The militant campaigns of MADD, the activism of Students Against Driving Drunk (SADD), a petition by national organizations for a ban on all alcohol advertising directed at or reaching the young, and the law requiring health warnings on alcoholic beverage labels reflected and supported the shift.

Despite falling sales, however, alcohol beverages remain a profitable business. The trend toward diversification and consolidation marks (according to a marketing report) "a shift from weaker to stronger hands, a trend toward deeper pockets" (*Advertising Age*, Oct. 13, 1986, p. 28). Liquor publicists are also

working hard to make a comeback. A typical news story inspired by the National Association of Beverage Importers, citing a 35-percent rise in vodka imports and interviews with local bartenders, carried the headline, "The martini is coming back strong; dry spell is over for the time-honored civilized drink" (*Philadelphia Inquirer*, April 9, 1987).

Analysts are divided on the nature and extent of the dry spell. They point out that despite the decline in overall sales, the number of adult alcoholics was still on the rise (see, e.g., *New York Times*, October 1, 1985). Furthermore, an increasing proportion comes from young people, women, and minorities. A National Association of Junior Leagues study found that more than half the women being treated for alcoholism in New York were 18 to 34 years old. The director of the study stated, "We are seeing the first generation of women who report drinking for the purpose of getting drunk" (*New York Times*, April 24, 1987, p. 17).

Advertiser Action

In recent years alcoholic beverage advertisers have explored a variety of ways to protect and extend their markets. Some want to abolish the ban on liquor commercials on television, but others are afraid of a legislative backlash. Some States are considering proposals to give up their monopoly of liquor sales and open supermarkets to wine and possibly beer sales, a common practice in other States.

Brewers are the most aggressive. "Faced with similar problems," a marketing study reported, "many other industries would have pulled in their marketing horns long ago . . . . The brewing industry's response has been almost the opposite . . . . [It] is doing everything possible to attract new customers, and one brewing industry executive calls it a 'panic' " (*Advertising Age*, Jan. 31, 1985, p. 16).

Some firms are promoting products with low alcohol content, promising more sobriety and fewer calories per glass. Others, such as Anheuser-Busch Companies, Inc., make grants to organizations like SADD.

The Seagram Companies, whose "moderation campaign" dates back to 1934 ("We who make whiskey say: Drink Moderately" stated the ads) produced commercials claiming that 12 ounces of beer, 5 ounces of wine, and 1 1/4 ounces of distilled spirits have equal alcoholic content. The three major networks refused to run the commercial, prompting Seagram to attack them in print ads. Critics charged that commercials placing distilled spirits on an equal footing with wine and beer was part of the effort to regain lost market share by selling it on the air. Seagram also increased its advertising budget by 6 to 8 percent to well over $100 million a year in a move to increase sales by getting more people

to drink less," claimed president Edgar Bronfman, Jr. (*Advertising Age*, July 18, 1985, p. 14).

Messages and Images

A.C. Nielsen, the broadcast rating and market research company, provides point-of-sale information to brewers, distillers, importers, and vintners through its Alcoholic Beverage Service. Clients can "assess the sales and marketing strategies of their own brands, as well as those of their competitors... [and] receive important 'reasons why' data"... (ad in *Advertising Age*, January 31, 1985, p. 33).

Armed with such intelligence, media buyers shop for best buys, and media sellers offer their services in the competition for the best drinkers in the marketplace. The following examples from ads periodically placed in recent issues of *Advertising Age* by upscale, downscale, and minority newspapers and magazines indicate the types of appeals media sellers make to media buyers, looking for alcoholic beverage industry patronage.

> Scotland for Scotch. Johnnie Walker for America. The Journal for results. (*Wall Street Journal*)

> People in the liquor business look for magazines with proven records. The fact is, since the repeal of the Volstead Act in 1934, The *New Yorker* has carried more pages of alcoholic beverage ads than any other magazine. (*The New Yorker*)

> Our readers are your best new market bet. Out of the total number of women in the United States who consume alcoholic beverages, they include: 1 out of 5 liquor drinkers! 1 out of 5 wine drinkers! 1 out of 5 beer drinkers! (*Family Circle*)

> She is black. She makes her own money . . . . Proportionately, compared to the total U.S. female population, she drinks more rum. More gin. More vodka. More imported dinner wines. More champagne and sparkling wines. But what she really drinks up is *Essence*. (*Essence*)

> More than 72 percent of *Diario las Americas* reader households consume alcoholic beverages, spending more than $15 million annually . . . . So advertise in *Diario* and you'll never have to worry about your liquor sales running dry.

The "Black Market"

One relatively recent development is a growing emphasis on extending the market "downward" into minority groups and ethnic communities that have not been prime advertising targets in the past. Some marketers turn to specialized or advertising agencies to develop special campaigns. Burrell Advertising of Chicago, for example, became the leading black-owned agency 14 years after its founding in 1971. According to a story about advertising executives in the trade

paper *Advertising Age* (December 19, 1985), its billings of $50 million were expected to double in 3 years and then double again in 5.

When given the Black advertising account by B-F Spirits Ltd., marketers of Canadian Mist, the *Advertising Age* story explained as follows:

> The agency knew that the rugged outdoorsy general-market theme wouldn't play in a Black consumer market . . . . Burrell's solution was to position drinking Canadian Mist as an event . . . . Each "Misting" ad shows a smartly dressed couple . . . against a vague background . . . . You didn't really know where they were. The "Misting" campaign changed the face of liquor advertising . . . . Canadian Mist's share of sales to Blacks has risen from about 7 percent to 25 percent.

Jack Daniel Distillery, a Tennessee-based company with a "distinctly white, Southern image," hired Burrell to launch a black-targeted effort. "The agency was careful to capture the history of Jack Daniels while skirting around its southernness," explains the manager of its distilled spirits account. "You can't take black people back to the good ol' days in the South because those are the days when we were getting lynched."

Another Black agency, Lockhart & Pettus of New York, was engaged by Canadian Club (of Hiram Walker, Inc.) to create a "black version" of its "Be a Part of It" campaign prepared by the firm's general market agency. Lockhart reasoned that "being 'a part of it' is not always desirable or possible for blacks" and created an ad showing a Black couple attending a fashion show and toasting each other. The theme in large type was "Forget About The Rest." "A copy change that suggests ignoring the rest of the world makes sense," Lockhart said. "It also supports a Hiram Walker program that pays tribute to Black designers and the company's sponsorship of fund-raising fashion shows."

Targeting requires a keen eye for nuances of the culture, executives said. But they also complained that "some critics look a little too hard" and cited this example:

> A recent Burrell-created spot for Stroh's beer shows some boyhood pals of a wealthy young black man drop by his palatial home. "Can you believe it?" one exclaims. "J.T. with an $18 million contract!" J.T. then leads his guests to an ice-choked swimming pool filled with Stroh's. The client loved it. Burrell was so proud of it, it was added to the agency's presentation reel. But one woman continues to write to the agency complaining that the spot perpetuates the stereotype that Blacks can succeed only in sports and that it condones overconsumption of alcohol.

Nevertheless Burrell executives believed, "the positives outweigh the negatives."

Relatively untapped market potentials also exist in countries where limited resources and traditional cultures have kept drinking within bounds of

occasional celebrations and ritual uses, and where advertising and marketing regulations are weak or nonexistent. Israel was such a market when Anheuser-Busch entered in 1984 with an aggressive campaign to promote "new American-style beer-drinking habits" (Weis 1986, p. 3). The campaign extolled the virtues of Budweiser's alcohol content being higher than that of domestic beers. (That practice is illegal in the United States. It was first reported on the business page of the *St. Louis Post-Dispatch*, Dec. 1, 1985.)

Another imported beer of even higher alcohol content followed in 1986 with a different appeal. It showed a stein of Tuborg beer together with a glamorous car, ignoring the alcohol-impaired driving implications. An analysis of alcoholic beverage ads in Israel showed most aimed at young people, especially young women, with lifestyle themes (success, sex, pleasure) dominating and dangers or moderation never mentioned (Weis 1986).

The Youth Market

The alcoholic beverage industry continues to be a major promoter of sports events and of youth- and sports-oriented programs and media. It pays about 20 percent of the cost of sports programming on television and radio.

In 1984 NAB engaged well-known first amendment lawyer Floyd Abrams to help oppose a ban on beer and wine commercials during prime-time sporting events programs. NAB President Eddie Fritts warned the proposed ban would have "a major impact" on college and university revenues from such programs (*Broadcasting*, July 16, 1984, p. 33). The ban did not materialize.

Furthermore, despite public pressure against programming targeted at youth, BATF relaxed its interpretation of the ban on active athletes in beer and wine commercials. Under the new interpretation, disingenuous in the extreme, active athletes were allowed to endorse alcoholic beverages as long as they were not shown drinking the product.

The broadcasting networks, mindful of the ever-present threat of an advertising ban, refused to embrace the new interpretation. Athletes and their agents were also cautious. "For athletes alcohol and substance abuse are such hot issues that a direct beer pitch might well lead to image meltdown," wrote *Advertising Age* columnist Robert Raissman (May 26, 1986).

No such timidity prevails in sponsoring racing and other sporting events. Anheuser-Busch paid nearly $1 million (not counting expensive television ad time) for the right to use the Budweiser beer logo at the 1987 Hagler-Leonard championship bout, including this announcement over the loudspeaker: "Once in a lifetime, two legends meet in the ring. Budweiser is proud to be the official sponsor of the Super Fight." Similarly, "Olympic fever" regularly grips beer advertisers long before the event. A $25-million deal with NBC secured Miller

Brewing Co. 3 years of major league baseball broadcasts as well as sponsorship of the 1988 summer and winter Olympics.

Beer ads on banners, gate signs, athletes' uniforms, and other prominent places at frequently photographed and televised large-scale sports and other events circumvent any limitation on youth-oriented advertising. It was noteworthy to see on the front pages of the sports sections of daily newspapers a news shot from the national collegiate track and field championship in which the words "Bud Light" appeared five times (e.g., *New York Times*, June 1, 1989, p. B-9). At the same time the era of deregulation has resulted in a 51 percent decrease of issue-oriented public affairs programs that may provide opportunities for education about alcohol (Donahue 1989).

The Campus Market

The battle for young consumers is also being joined on college campuses. Alcohol awareness campaigns and other administrative moves have dampened the chugalug and other drink-to-get-drunk party promotions of beer companies, but they have not fundamentally altered the culture and environment of heavy drinking and the blatant sexism associated with it.

Publishing guidelines have attempted to restrict the most extreme forms of alcohol promotion on campus such as the examples that follow. A report in the *Chronicle of Higher Education* (Feb. 6, 1985) observed: "Beer and liquor companies account for a large part of the advertising in student newspapers across the country—some say as much as two-thirds of it. Although the guidelines have helped clean up the content and message of those ads, many still associate drinking with glamor, with success, and with sex."

Another review of studies (*Chronicle of Higher Education*, March 25, 1987, pp. 32, 34) concluded that "serious alcohol use among students remains at high levels." Most campus officials consider alcohol drinking by far the most damaging drug problem, promoted by the "glamorization of alcohol use in the media." An alcohol risk survey of 325 campuses showed that many colleges had failed to back up their policies with adequate abuse prevention programs (*Chronicle of Higher Education*, Dec. 17, 1986).

The cover story of the April 1985 issue of an occasional publication called *Newsweek on Campus*, "Crackdown on Drinking," featured a poll showing 7 out of 10 students drinking "generally... too much." Pictures of sexy, active students drinking on spring break illustrated these presumably discouraging norms.

The 1987 "Spring Break Guide" color brochures and posters published by brewers and distributed nationally as inserts in college newspapers typically made no mention of any crackdown. Prominent on the cover was a blond-wigged, smirking Hulk, strolling among palm trees, lifting a gigantic beer can into the

air, pushing male wimps into the sand, and (pied piperlike) attracting bikini-clad beauties. Each inside page offered fame, fun, laughs, prizes, nostalgia, girls, and T-shirts with every can of beer. The posters elaborated these themes.

One poster pursued the "brute" theme with a giant, hairy black arm extending a "King Kan" of beer toward the tanned body of an admiring blonde. Another featured a "party headquarters calendar." In the middle was the open door of a refrigerator showing three shelves. On top were nine bottles and four cans of beer, some milk, cheese, mustard, and a half-eaten sandwich. On the middle shelf were nine cans of beer, an 8-pack and a 12-pack of bottles of beer, one open can of tomato soup, and a half-eaten pizza tray alongside a large bottle of beer across the top of the packs. The bottom shelf held more King Kan cans. The back of the calendar advertised 12 other posters. They featured beer with guitar music, beer with a blonde beauty, beer with a Black beauty, beer with nostalgic scenes, beer with racing cars—all appealing, all available.

In 1989 these industry-sponsored supplements did not include alcohol ads, possibly in response to antialcohol pressures. It is too early to tell, however, whether that policy will be permanent.

Regulation and Legislation

Efforts to strengthen controls in force since the mid-1930s led to the voluntary ban on broadcast commercials for distilled spirits, leaving only beer and wine to be sold on the air. The movement for further controls escalated in the 1980s. As with tobacco, ads linking alcohol with images of glamor, youth, sports, and healthy living were among the movement's major targets.

Project SMART (Stop Marketing Alcohol on Radio and Television), a coalition of some 25 citizen groups including MADD, the National PTA, and the National Council on Alcoholism, supported legislation and petitioned the FTC to place warnings and other restrictions on all alcohol advertising and to ban beer and wine commercials from the airwaves. The FTC rejected the petition and agreed with the advertisers and broadcasters that there was no convincing evidence that advertising necessarily leads to abuse.

Coordinated since 1984 by CSPI, SMART shifted its campaign to counteradvertising. It supported bills to require warnings on labels and to compel radio and television stations to give time for countercommercials equal to paid time for alcohol commercials.

Congress passed a labeling law that took effect in late 1989. It requires warnings on cans and bottles (but not in ads) of the hazards of drinking while pregnant and while driving a car or operating machinery. The beer industry's response was a stepped-up campaign of moderation and reassurance with

slogans like "Know when to say when" and "It's older than the written word and as basic as bread."

Regulation on the air proved to be more problematic. The congressional statute that banned tobacco commercials blazed a legal trail for the regulation of alcohol advertising. The courts upheld its constitutionality on grounds that (1) although printed messages require literacy and an affirmative act to be read, broadcast messages are "in the air" and virtually inescapable; (2) the public owns the airways and broadcasting is a regulated and licensed activity in the public interest; and (3) the loss of advertising revenue per se does not deprive the broadcaster of first amendment rights. A review of these and other legal considerations (Schofield 1985, p. 539) concluded that, "should legislation be enacted banning alcoholic beverage advertising from radio and television, any First Amendment challenge to that law is most likely to fail."

A broader legal analysis of the future of alcohol advertising (Hovland and Wilcox 1987) reviewed the consequences of the *Posadas* decision upholding an advertising ban if "serious harm" can be proven. Although the conclusion was again that "advertisers have good cause for concern," the concern may be groundless as long as the FTC imposes a difficult test for attributing "serious harm" from advertising alone.

The tactic that drove smoking commercials from the air in 1971 proved to be difficult to apply to alcohol, especially in the political climate of the late 1980s. With $750 million in television advertising at stake (*Variety*, January 23, 1985), NAB joined with advertisers and the alcoholic beverage industry to block any regulation. NAB announced that saving beer and wine commercials would be the organization's "number-one priority." "Haunted by the memory of what happened with cigarettes and determined to protect their hefty beer and wine billings . . . , TV's Big 3 have no trouble accommodating paid youth-oriented ads and free drunk driving admonitions," wrote *Advertising Age* columnist Maurine Christopher (August 12, 1985, p 46).

It had taken a relatively active FCC and a court order to admit tobacco counteradvertising under the Fairness Doctrine. But in the mid-1980s the FCC abandoned the Fairness Doctrine and let many public interest provisions lapse or allowed the marketplace or industry to perform on a voluntary basis. Even the requirement to keep logs was abolished, making it difficult if not impossible to ascertain what was broadcast.

Like tobacco, alcoholic beverages are products of increasingly concentrated and even overlapping but diversified conglomerates well integrated into the economic and media structure of American society. Drinking itself is an integral part of the culture and of the dramatic formula seen on television plays even more often than on commercials.

Unlike tobacco, alcoholic beverages have redeeming features, but their destructive path is broader. Public and legal pressures forced the industries—and their trade and governmental protectors—to go on the defensive. It has been a strong and largely successful defense, including forays into new areas of marketing opportunity and social vulnerability.

Other Drugs

Substances that can cure, soothe, and thrill; that can be used for medication, celebration, recreation, and mind alteration; and that can calm and captivate their consumers will inevitably be manufactured, promoted, and used on a huge scale. They will be judged helpful or harmful, and legal or criminal, depending on the time, place, and occasion and the cultural, historical, and medical (or nonmedical) circumstances of their use. In addition to all other functions, they will also serve purposes of power and profit. In the long run, industrial priorities, political realities, and cultural values and taboos have played and will continue to play a major role in structuring the role of drugs in our society.

Legal Drugs: Marketing and Advertising

The pharmaceutical industry is one of the key players in the drug-oriented culture. It perpetuates the use of chemical substances by producing and marketing three main kinds of drugs. Current issues, controversies, and trends in cultural representations can best be understood in light of the history of these categories:

- drugs prescribed by doctors and sold exclusively by pharmacists;
- drugs that need no prescription but are promoted through medical professionals under the so-called ethical policy (some drugstore chains have begun to challenge this policy by selling "ethical drugs" as well); and
- drugs advertised and sold directly to consumers as OTC drugs, including the so-called proprietary (patent) medicines.

Drug advertising has long been a controversial issue. It has been debated by the pharmaceutical, advertising, and media industries, and by legislatures, courts, regulatory agencies, and medical and consumer groups. These groups have fought over pricing and labeling; false, deceptive, or spurious claims and cures; and the broader implications of "pill popping" and the "drug culture."

Nostrums and remedies supported the rise of the commercial press and still provide significant media income. "Sal Hepatica was the cornerstone upon which Brystol-Myers was built...," said the executive vice president of the Proprietary Association, which represents drug manufacturers. "Carter's Little

Liver Pills and many others played similar roles for their companies" (*Advertising Age*, May 23, 1960, p. 31). One still finds in media presumably targeted at the readers of publications such as True Confessions many mail-order ads for panaceas for problems related to health and sex.

The Pure Food and Drug Act of 1906 included the first attempt to control blatant exploitation of sick and gullible people (Cook 1958; Holbrook 1959). Yet a watered-down bill left most patent medicine pitchmen free to hawk their wares.

A press survey in 1933 found that most newspapers carried patent medicine ads condemned by the AMA. A bill to strengthen public controls over the drug industry and its advertising practices provoked the vigorous opposition of drug manufacturers and virtually all newspapers, magazines, advertisers, and broadcasters. A study of New York Times news coverage between 1933 and 1935 found 19 stories dealing with the potential loss to business if the bill were passed and only 1 noting its importance to the consuming public. The proposed bill was first weakened, as the Pure Food and Drug Act had been, and then amended to switch regulation from the FDA to the FTC, whose control of drug labeling and advertising had been less vigorous (Nichols 1972).

Continuing medical and public clamor led to the passage of the Food, Drug, and Cosmetic Act of 1938, which specified that a category of the more dangerous drugs should be sold only by doctor's prescription and through licensed pharmacists. The promotion of these drugs through what was later called "ethical advertising" was to be directed to physicians and pharmacists rather than the consuming public. The policy, immediately attacked by some drug manufacturers and advertisers, eventually fell victim to the deregulatory era of the 1980s.

In the meantime, the National Better Business Bureau reported in 1957 that the number of flamboyant and false drug ads was rising again: in 2 years, the number of complaints had increased tenfold (*Advertising Age*, October 7, 1957). Hearings conducted by Senator Estes Kefauver revealed 7000-percent manufacturers' markups, 33-percent pharmacists' takes, promotion-inflated prices, fraudulent advertising, and other anomalies affecting both prescription and OTC drug marketing. The hearings paved the way for the Kefauver Drug Amendment of 1962 requiring ads for ethical drugs to disclose side effects, contraindications, and effectiveness.

Prescription Drug Advertising

Prescription and ethical drug advertising, a $25-billion business, supports highly profitable medical and pharmaceutical journals and other forms of promotion to health professionals. The AMA's drug testing program restricted the advertising of prescription drugs without its seal of approval until the

mid-1950s. When that program was discontinued, advertising in the *Journal of the American Medical Association* tripled and its revenue nearly doubled (*I.F. Stone's Weekly*, July 17, 1961; Gewirtz and Graham 1970), despite AMA's ban on distilled spirits and tobacco ads.

With what *Advertising Age* described as the "boom in the ethical drug industry" (March 24, 1958, pp. 3, 72), new medical publications were established, creating additional sales vehicles—and income. The slick newsmagazine-style *MD*, launched in January 1957, limited its advertising to 100 pages an issue. It was turning down ads by March and doubled its gross income in the first year.

Ethical advertising came under attack in the courts, the legislatures, and the marketplace. When some drug manufacturers looking for broader markets began selling ethical brands directly to the consuming public, alarmed pharmacists and consumer advocates pressured the FDA to sponsor a moratorium halting the practice. The plan was to study the effects of previous advertising of ethical drugs, conduct test marketing, and review FDA rules in light of the results. But the FDA suspended the moratorium before it ended, without report or explanation.

Other events of the mid-1980s came into play. Deregulation was in full swing. The FTC had refused to strengthen advertising controls or ban children's program commercials. Its new chair, a noted deregulationist, became director of the Office of Management and Budget (OMB). The OMB in turn put pressure on the FDA to lift its moratorium on prescription drug ads aimed directly at consumers (*Advertising Age*, August 26, 1985, p. 1). "A lot of people here are kind of bent out of shape over this," an FDA official told *Advertising Age*. "They think this is being shoved down our throats by OMB."

The ethical prescription drug industry was not happy either. It was already spending at least $1 billion a year advertising to medical professionals. That sum broke down to more than $2,500 for each physician writing prescriptions (*Advertising Age*, Jan. 28, 1985). The industry was anxious about alienating physicians and pharmacists who benefited from the ethical drug policy. As it was, prescription drugs accounted for 70 percent of all drug-related deaths, more than the deaths resulting from all illicit drugs combined. Switching to direct advertising of ethical and prescription brands, as the advertising industry and some drug manufacturers intended to do, exposed pharmaceuticals to new legal liabilities in exchange for uncertain benefits.

Nevertheless, foreign competition and domestic price-cutting (mostly from generic versions of once-patented drugs) moved some major drug companies toward consumer advertising of previously ethical products. At least one major broadcasting network (CBS) prepared guidelines to accommodate the new source of commercial income.

A staff report for the House Energy and Commerce Subcommittee on Oversight and Investigations cautioned, a bit plaintively: "If the pharmaceutical industry, broadcasters and other media and advertising industry members feel they ultimately stand to gain from initiating this advertising, they should be prepared to explain their calculations in a hearing" (*Advertising Age*, January 20, 1986, p. 67). But with the growing practice of direct advertising to physicians and even selling drugs to patients, it was unlikely that, short of comprehensive new legislation, the ethical policy of public and consumer protections in the drug field could be restored.

Nonprescription Drug Advertising

Ten of the biggest drug companies control the $7-billion-plus nonprescription, proprietary, or OTC drug market. More than $1.5 billion in this market is spent on advertising. The media stakes are high, and the cost of offending can be equally large. A critical article in *Life* magazine, based on facts Senator Kefauver's hearings revealed in 1960, prompted one of the biggest drug advertisers, Abbott Laboratories, to pull $300,000 worth of advertising from the magazine (*Advertising Age*, Oct. 31, 1960).

Fierce competition and questionable promotion practices make OTC drug advertising a target of national consumer and health organizations and such worldwide bodies as the International Organization of Consumer Unions and WHO. The advertising code of the drug industry in each country is designed to comply with the laws and prevent harsher restrictions. While some countries have few or lax controls over drug advertising, others (including Finland, Ireland, the Netherlands, the United Kingdom, and Canada) use either pharmaceutical or both pharmaceutical and media experts to screen all drug ads.

Bangladesh was the first developing country to adopt (in 1982) a policy banning harmful, unnecessary, and imported drugs that can be produced at home by simple technology. The eight transnational drug producers that control 80 percent of the drug market in Bangladesh fought the measure by bringing pressure through their Governments (Connington 1982).

In 1984 the International Advertising Association (IAA) released a study of drug advertising in 54 countries. The survey found that most countries permitted OTC drug claims for specific diseases and many had no government-mandated groups reviewing ads. The IAA warned as follows:

> Intensive competition among some drug manufacturers has occasionally led them to invent vague ailments (the "blahs" or "behavioral drift") for which they claimed that their products were suitable. Or they may have promoted the notion that the taking of certain OTC drugs is essential in maintaining good health (laxatives, vitamins and dietary supplements) or, at least, would not do them any harm.

> Together with repeated exposure to print and broadcast advertisements, these methods have generated criticism that the drug industry is fostering a cultural "drug orientation" that inculcates a dependence on medicines—both prescription and OTC—to solve all sorts of physical and emotional problems. (*Advertising Age*, April 22, 1985, p. 55.)

Encouraged by the successful drive to ban cigarette commercials, U.S. consumer groups, media critics, and health professionals pressed claims that much OTC drug advertising is harmful and leads to abuse. They pushed for stricter controls, including banning drug ads from the airwaves. Broadcasters, facing the prospect of losing more than $500 million in revenues, fought back and extended their codes in self-defense.

The NAB guidelines had advised that drug commercials refer to the need to follow the instructions on the label, not show pills being taken on screen, and be wary of advertising drugs in children's programs or showing children in drug commercials. The guidelines allowed the showing of nasal sprays being administered but gave the improbable advice that there should be "a time lapse between the taking of the medicine and the improved condition of the sufferer" (*Advertising Age*, March 26, 1973, p. 4). Although the industrywide code was abandoned in the late 1970s, the networks and some independent stations decided to extend drug commercial controls.

At the height of the citizen and consumer movements to effect changes in broadcast programming and policy, 15 State attorneys general petitioned the FCC to ban drug commercials on television before 9 p.m. A few months later Donald L. Kanter, former advertising agency executive and chair of the graduate marketing program at the University of Southern California, released a 1976 study of schoolchildren revealing that although television commercials had lower salience than the programs, pharmaceutical advertising might be "one more cultural prop in the maintenance of favorable attitudes toward drug usage among the young" (*Advertising Age*, April 5, 1976).

Prodded by these developments, the FCC and the FTC sponsored forums in which industry executives and their researchers confronted citizens, consumers, and academic critics—and called for more research. Meanwhile, the industry counterattack, congressional failure to overhaul the Communications Act of 1934, and the powerful drive to dismantle rather than strengthen public interest regulation led to the collapse of the citizen reform movement.

Illegal Drugs

The magnitude, intractability, and corrupting influence of the illicit drug trade probably exceeds that of the illicit alcohol industry during Prohibition. A *New York Times* report (August 10, 1984, p. A25) estimated its scope, though not necessarily its damage, at 10 times that of legal drugs. The size and

profitability of the trade equals that of any one of the top two or three industries in the country. Senator Alfonse M. D'Amato (R-NY) charged, "Law enforcement agencies have been outmanned, outgunned, and outfinanced by an illegal industry whose gross receipts are estimated to exceed well over $100 billion per year" (D'Amato 1986). Even though the drug business inflicts an annual toll of $59 billion in health and related crime damage (Graham 1987), the evidence is overwhelming, and all too visible in the news every day, that drug trafficking is a "highly organized, relatively low-risk, lucrative commercial venture" (Susman 1975).

Global "Wars on Drugs"

The media spotlight in the never-ending global "drug wars" tends to focus on current trouble spots. In 1840 the British defeated the Chinese in a war fought to provide an "open door" for opium traders. When the traffic into the United States prompted the Government to sign a drug treaty with China in 1880, the trade had become too large and profitable to enforce it (Susman 1975). The focus shifted to Red China in the 1950s, Southeast Asia in the 1960s, and Central America and the Carribbean in the 1970s and 1980s. Political pressures and public anxieties provoked diplomatic and military adventures reaching deep into the economic life of many countries, threatening their independence and straining their relationships with the United States.

The Omnibus Anti-Drug Abuse Act of 1986 was one result of these developments. It mandated automatic suspension of aid, bank loan support, and preferential trade agreements to countries not certified by the President as having made "significant progress" in controlling drug traffic. "On no other issue does the United States have a tougher automatic foreign sanctions law," commented the *New York Times* (Oct. 23, 1986, p. A-8). In its first report to Congress required by the act, the Department of State announced that all countries had received Presidential certificates except Iran, Afghanistan, and Syria, none of which received American aid in any case. Meanwhile the illicit drug trade rose both globally and domestically, more than offsetting any reductions the interdiction and eradication programs may have achieved (*Philadelphia Inquirer*, March 3, 1987).

The current war on drugs is part of a series of cyclic attempts to control the drug problem. Historian David Musto (1973) has noted that the same basic drugs (opium derivatives, marijuana, and cocaine) have been involved throughout.

One million pounds of raw opium had been smuggled into the United States by 1897—drug traffic that fed the prejudice against Chinese laborers (Susman 1975). The use of coca preparations in Europe and the United States was widespread around the turn of the century and gave the famous cola drink its

popular start. The charge that, unlike alcohol or tobacco, cocaine was a "hard" drug was made partly on racial grounds (Zinberg 1975). The Narcotics Act of 1914 led to a sweeping crackdown directed largely at Black users. Visions of "Negro cocaine fiends" attacking white women and generally running amok filled the press and fed and justified both bans and repression (Ashley 1976).

Then, in the 1920s and 1930s, "reefer madness" became an issue. The Marijuana Tax Act of 1937 was directed at Hispanics of Mexican descent. "Psychedelics" added to the polarization of society during the upheavals of the Vietnam war era, giving Nelson Rockefeller his biggest campaign issue, later to be escalated to the national level.

"The Rockefeller laws," passed in New York State in 1973, eclipsed all previous legislation in severity. They led to no reductions in use but to larger case backlogs and further wars on drugs riding the crest of ever more alarming media-publicized crime waves and drug epidemics. A study of drug arrest records in 1975 found that at times of great publicity and "get tough" legislation, such as mandatory sentences, "revolving door" justice prevails. "Community pressures and police perception of public demand ... changed who was arrested, where, for what, and in what manner," typically concentrating on nonwhite areas (DeFleur 1975, p. 98).

Zinberg and Robertson (1972) found that on a day when there was no major news item concerning drugs, the subject nevertheless occupied 11 columns in the *Boston Globe*, 12 in the *Washington Post*, and 19 in the *New York Times*.

The Omnibus Anti-Drug Abuse Act of 1986, and After

Although drug use in general peaked in 1979, the sudden notoriety of cocaine use by Hollywood personalities and other celebrities and the spread of crack started a new war on drugs that is still under way—one that has been abetted and often distorted by the media. Publishers, broadcasters, and advertising trade associations fired salvos through antidrug campaigns reported "worth about $1.5 billion in time and space over the first three years" (*Broadcasting*, July 14, 1982, p. 67). The professional sports establishment, university campuses, and many large private and public organizations followed suit.

In the spring and summer of 1982, *Newsweek* ran three drug cover stories, a total of 34 pages on the "drug epidemic" (and 5 to 10 pages of distilled spirits and tobacco ads in each issue). Other magazine cover stories, televised "drug raids," network spot announcements and documentaries, daily newspaper coverage, and massive publicity followed. "I was a drug-hype junkie," Adam Weisman confessed in the title of his article in the *New Republic* (October 6, 1986). *A New York Times*/CBS poll reported in August 1986 that more respondents termed drugs our most pressing national problem than named unemployment, the economy, or fear of war—a sixfold increase in 5 months.

The drug-related deaths of Black basketball stars Mike Helms and Len Bias further spurred Government drives and legislative initiatives. Despite the fact that cocaine-related deaths were a fraction of the deaths from alcohol or tobacco and not much more numerous than deaths from appendicitis (Weisman 1986), the money, power, and corruption generated by the drug traffic continued to grow. Congress, the White House, and candidates for office in the fall of 1986 rushed to advocate tough new antidrug measures in an unprecedented preelection stampede.

On October 27, 10 days before election day, President Reagan signed the most massive antidrug bill ever enacted by Congress. The original language of the bill urged the media to refrain from producing material glamorizing drugs and to produce materials "which encourage rejection" of drugs. These provisions, the only ones dealing with the mass cultural sources related to drug use, proved to be too strong. The final act merely asked "media outlets . . . to provide information" about drug abuse.

As the war on drugs continues, relatively little time is taken for serious reflection about the underlying issues and the role of the media. Public opinion researcher Lloyd Johnston (1987) observed that although the crack crisis was real, and awareness of that was needed, placing drama above substance was the main problem. Johnston observed (pp. 7-8),

> an endless chain of drug busts and airplane and boat chases to the exclusion of a more thoughtful and penetrating look . . . . Prevention and demand reduction strategies are getting increasing lip service . . . but when you look at where the column inches, program minutes, and Federal dollars go, only a small portion goes to demand reduction . . . . The resulting inability of our society to deal with a very serious problem is too high a price to pay for entertainment in the news.

Media Content

Studies of how the media depict smoking, drinking, and other drug use vary in scope, method, and objective. Some focus on specific marketing, editorial, and program strategies. Others report systematic monitoring and analysis dealing with large systems of messages to which millions of people are exposed.

In previous sections of this chapter, media content was cited mainly to illustrate policy. Here the emphasis is on what the analysis of representative samples of media content can reveal about the often implicit strategies and dynamics of institutional media behavior. The next section will review research about its consequences in public information, attitudes, and actions.

Smoking

Laws, codes, and regulations notwithstanding, no American can escape growing up and living with vivid images of daring, sexy, happy, and healthy smokers. Few witness the consequences. The FTC once noted that funds promoting these happy images are "several hundred times greater" than those spent alerting the public to the hazards of smoking (FTC 1981, pp. 2–3).

Studies of cigarette advertising confirm familiar visions of seductive, wealthy, healthy, adventurous smokers (Barlow 1985) and of youthful models, suggestive poses, and inviting scenes (Frost 1986). An analysis of the psychology of cigarette advertising (Fine 1972) suggested that with:

> what tobacco officials call "The Health Scare," cigarette advertising must serve three distinctly separate purposes. First, for some individuals, particularly the young, [it] must convince them that they will enjoy smoking. Second, for those already smoking, and those about to begin, promotions must convince them that it is smart and safe to smoke. Third, for those currently smoking, the advertisement must convince the target to smoke the "correct" brand.

In order to "sell death" successfully, Fine concluded, the advertising campaigns establish associations between smoking and the themes of scientific risk reduction (lower tar, filters, and so on), humorous relief, macho illusions, female independence and creativity, and the natural good life.

A review of more than 50 press commentaries and institutional ads from 1974 to 1985 confirmed some of the themes of tobacco issue advertising discussed previously. It concluded that "both unpaid and paid tobacco propaganda employ four major, overlapping strategems: (1) Isolate the enemy. (2) Ennoble smoking and smokers. (3) Scare the bystanders. (4) Embrace sweet reason." Together these strategems embody the underlying contention that "Tobacco is democracy. Tobacco critics endanger personal freedom and national liberty" (Shear 1985).

Studies of news reporting reflect the ambivalence noted in the discussion of news policy in previous sections of this report. Freimuth and others (1984) found that measures individuals could take to minimize the risk of cancer received little coverage. Cigarette smoking, the major cause of cancer individuals can control, was discussed in only 7 percent of news stories focusing on causes of cancer.

The medium most conspicuously free from tobacco advertising is television. Smoking on television programs is relatively rare. The University of Pennsylvania Cultural Indicators data bank (Gerbner, et al. 1982) showed that 7 percent of all major characters (11 percent of males, 2 percent of females) smoked in prime time. There was less smoking in situation comedies, more in crime and

adventure programs. The most smoking was observed in serious drama (including old movies); there 13 percent of men and 4 percent of women smoked.

No study observed any character refusing to smoke or expressing antismoking sentiments. However, there was a hint in some studies of a declining frequency of smoking and increasing negative associations with smoking. De Foe and others (1983, p. 33) reported that cigarette use was "shown sparingly, less than once in every three hours of program time, and the rate appeared to be going down over the period of five seasons." Greenberg's (1984) study of 10 top-rated programs and 2 daytime serials found one instance of smoking in every 4 hours of programming and several accidents due to smoking, such as an explosion and a fire. Finally, 13 of the 34 alcoholics found in the Cultural Indicators' 14-year sample also smoked (Signorielli 1986). That is 36 percent compared to the 7 percent of all television characters who smoked.

Drinking

The effects of drinking, as well as the habit itself, are largely culturally conditioned. Marlatt's (1982) study suggests that American men become more aggressive when they think they are drinking vodka tonic (but actually only tonic water) and less aggressive when they believe they are drinking only tonic (but actually vodka and tonic). In Western art and literature, drinking tends to be associated with relaxation, sociability, and coping with the rules and pressures of the game of life; drunkenness, with testing or breaking those rules.

As a stock literary and dramatic device, drinking provides pauses, bridges, and transitions. Getting drunk is supposed to help shed inhibitions and show the inner or other self, with comic or tragic effects. Advertising and the portrayal of drinking in general media content play on such associations. In so doing, they form the most pervasive common cultural bases for cultivating assumptions about drinking in American society.

Advertising

The heaviest concentration of alcohol ads is in such upscale magazines as *The New Yorker*, *Scientific American*, *Psychology Today*, and certain men's magazines. However, Black-oriented magazines also have a higher than average concentration of alcohol ads. The use of celebrities is the most frequent device (one in four ads) in Black adult-oriented magazines (Strickland and Finn 1984).

A study of themes in a large sample of alcohol ads in 13 national magazines (Breed and De Foe 1979) observed that *Playboy* and *Ebony* devoted the most space to these ads, followed by *Harper's*, *The New Yorker*, and *Time*. The most frequent themes associated drinking with wealth, success, and luxury (28 percent); social approval and friendship (22 percent); relaxation (22 percent); and pleasure (22 percent). These were followed by exotic adventure, in-

dividualism, and sex (each more than 10 percent). The implied association between the beverage and the promised value could stand a test of logic in only 7 percent of the ads. Appeals to moderation were made in only 10 of the 454 ads in the sample, but 28 seemed to encourage more than moderate drinking, as implied by the number of glasses and bottles pictured per person shown. Appeals to tradition, history, royalty, and military or literary success were made in more than one-third of the ads. The researchers questioned whether the ads did not support heavy drinking (as well as distorted images of the "good life," past and present) by their glamorous associations and denial of problems. "Alcohol ads," they concluded, "...show only the pleasant and relaxed face of alcohol while blacking out the ugly face"(p. 521).

College newspapers, particularly magazine supplements folded into college newspapers, rely heavily on alcohol advertising, especially beer advertising. Half of all national ads in a sample of 32 college papers were for alcoholic beverages. Three times as many column inches per issue were devoted to alcohol as to books. Typical beer ads show likable rebels flouting the rules and having the time of their lives—with a bottle in hand.

Atkin (1984) summarized research on both magazines and television, including studies by Atkin and Block (1981) and Finn and Strickland (1982). Almost all television beer commercials showed people, but only one-third of magazine alcohol ads did so. Males in their early thirties dominated both portrayals—in addition to the bottle, which was centrally featured in about two-thirds of the commercials and half the magazine ads. The characters typically held the bottle but were not shown in the act of drinking. The lifestyle appeals extolling generic benefits of drinking rather than specific brand characteristics were, in order of prevalence, social camaraderie, masculinity-femininity, escape, elegance, romance, adventure, social acceptance, sexuality, social esteem, and success. Many ads (42 percent on television, 8 percent in magazines) implied that alcohol can be consumed in great quantities. Few suggested moderation (none on television, 8 percent in magazines), and no ads provided information about harmful consequences.

Stories, Plays, and Movies

Winick (1981) traced the connection through classic works of fiction and biography to modern mass media. News stories featured drinking when related to crime, accidents, or celebrities. More than 10 percent of country music featured drinking, both as normal and as leading to ruin.

The Motion Picture Production Code (in effect through 1968) cautioned against the use of distilled spirits "when not required by the plot for proper characterization." During the 1960s about 5 percent, and in 1972 about 9 percent, of films included significant portrayals of drinking. Winick noted the

outstanding works showing the devastation caused by alcoholism and described lighter treatments, including the association with sex, in many plays, films, and television programs. He claimed that British, French, and Italian films seldom showed disinhibition resulting from alcohol; in those films drunks were more likely to fall asleep. He reported that jokes about drinking represented 6 to 8 percent of all jokes, more than half of which dealt with the bizarre behavior of heavy drinkers.

Stories, fictional as well as factual, can be seen as advising readers on how to act or not to act. Breed and others (1980) studied three popular magazines from that point of view. They found that "readers of *Modern Romances* get a picture of drinking as dangerous, readers of *Playboy* 'learn' that drinking is expected, and readers of *Cosmopolitan* receive a mixed picture of drinking. Overall, the quality of advice is uneven."

Similarly, Breed and De Foe (1982) found a mixed picture in comic books. Superman, of course, never drank; other superheroes drank only ceremonially, and those who drank to excess were either villains or derelicts. The code of the Comic Magazine Association of America forbids scenes showing minors drinking alcohol. However, drawings of bottles, glasses, and goblets in the background of some frames suggested drinking, and the alcohol problem was ignored rather than being given serious treatment, the researchers concluded.

Early movies played an important role in the movement for temperance. They presented an attractive alternative to saloons, and many showed the evil effects of drink. Liquor industry and brewers' trade journals complained that the movies never showed drinking in a good light (Herd and Room 1982).

Religious pressures and a strict production code kept the frequency of drinking in movies low until after World War II. The code was abandoned in the 1950s. With the rise of television, movies became more specialized and sensational, with more frequent, casual, and explicit alcohol and drug use (Herd 1983).

Temperance melodramas continued to be made until the early 1930s. Many of their conventions—such as "the stock scene of delirium tremens, and the ever-faithful wife—were in fact carried over into the alcoholism films of the postwar period," wrote Room (1985). "The Lost Weekend" initiated a new era of films influenced by the antialcoholism movement. But by the 1960s, drinking became more a province of television than of movies (Room 1985). With a nightly audience higher than movies had ever had in a week, and a more formula-bound method of serial productions, television introduced a new era of repetitive and pervasive cultural portrayals.

Drinking on Television

Drinking on television is inescapable. Futch and others (1984) observed it on 12 of the 15 "most popular prime-time programs." They found an average of 2.2 drinking scenes and 5.3 verbal references to alcohol per program hour. The mean duration of the drinking scenes was 97 seconds, much longer than the scenes in which nonalcoholic beverages were consumed (40 seconds). Most such scenes took place in homes (42 percent) and bars (17 percent). Studies since the 1970s show that the patterns are stable and enduring. They are built into the basic dramatic formulas that still govern commercial television.

In a review of research on alcohol use on television, Greenberg (1984b, p. 145) concluded as follows:

> During no hour of the evening does the alcohol usage rate on fictional television series average less than 1 1/2 acts per program hour. And during the later hours of prime-time—9–11 p.m.—no hour goes by with an average of less than three instances of usage. One can find no program type, save Saturday mornings, with less than one or two instances per hour, and the more heavily watched types of situation comedies and crime shows exceed four acts per hour during the most recent season analyzed. Conservatively, a youngster, too young to drink, will be exposed to 10 drinking acts on television during a day's viewing; . . . this can be projected to more than 3,000 in a year's period. (p. 145)

A subsequent report by Greenberg and others (1984) found that the rate of alcohol use increased to 2.7 per hour of prime time, with crime and action shows averaging about twice the rate of family dramas. Situation comedies, however, became the most likely to show drinking (4.7 times per hour) during the 2-year study period.

Looking more closely at the 10 top-rated programs, Greenberg (1984) found it "startling" that half of all the beverage consumption was alcoholic (8.1 alcohol incidents per hour), with "Archie's Place" (set in a bar) reaching 16.5 per hour. Noting the concentration of drinking in four CBS situation comedies in the top 10, Greenberg commented that "if one watched this lineup with any regularity, and 30+ million did every Sunday night last season, there would be fifteen to twenty alcohol incidents in their two-hour time period." The occurrence of any single category of human behavior at such a rate, Greenberg suggested, "has to rank high on the set of things one could reasonably expect to be occurring frequently" (p. 203).

Wallack's (1985a) study found that 10 percent of all prime-time scenes made some reference to alcohol, and the average was 11 drinking acts per hour. Feature movies in prime time had the highest rate (18 per hour) of drinking scenes. Three-fourths of all scenes showed preparation and one-fourth showed the actual ingestion of alcoholic drinks. Alcohol is clearly the preferred beverage

of television drama. "While it accounts for only one-sixth of total beverage use in the real world, on television alcohol drinking acts are found almost three times as often as the combined total for coffee/tea, soft drinks, and water" (p. 11). Breed and De Foe (1981) also found that alcoholic beverages not only outnumbered other beverages consumed on television but that the pattern of drinking on television was virtually the inverse of the pattern in daily life. Alcohol drinking acts were more than twice as frequent as the second-ranking coffee and tea, 14 times as frequent as soft drinks, and more than 15 times as frequent as water. Of all identifiable alcoholic beverages, 52 percent were hard distilled spirits, 22 percent were wine, and 16 percent were beer. Alcohol "was treated almost as a neutral substance, almost as a prop" (p. 14).

Nor is all this drinking a casual affair of a glass or two. Breed and De Foe (1981) analyzed 233 scenes about alcohol in prime-time drama and found that 40 percent showed "heavy drinking" (five or more). An additional 18 percent involved chronic drinkers.

Despite the rising concern about alcohol, the frequency of drinking on television has not abated. The University of Pennsylvania's Cultural Indicators data show that reference to or portrayal of alcohol had increased since 1969, reaching 70 percent of prime-time programs in the 1980s. More than one-third of all characters in television drama were shown actually drinking (something commercials are not allowed to do), but less than 2 percent suffered any ill effects (Signorielli 1986).

Turow and Coe (1985) studied the incidence of illness in prime time and found that the frequency of an exotic disease like leprosy was the same as that of alcoholism. De Foe and others (1983) also noted a steady increase in alcohol-related acts per hour from fewer than five in 1976 to more than eight in 1982. Although increases were found for nonalcoholic drinks, they were not nearly as steep. Wallack (1985) reported that the frequency of alcohol use on television rose from 62 percent of all beverages to 74 percent during the 8-year period of the study.

Who are the drinkers? The Cultural Indicators data showed that about 37 percent of major adult characters were seen drinking alcoholic beverages. Unlike in the real world, television women are as likely to drink as men. Drinkers are as likely as nondrinkers to be good and successful but more likely than nondrinkers to be serious, and also married or romantically involved. They are also more likely to be wealthy (Signorielli 1986).

Breed and De Foe (1981) summed up their findings on justifications for drinking:

> Heavy drinking was very seldom excused or rationalized in the dramas, but it often was—39 percent of the time—in the situation comedies. The chief mechanism was humor. The episode would end with the alcohol abuser suffering a hangover, while others (and sometimes the drinker) would deliver a joke or a series of jokes. In other cases, intoxication was excused by rationalizations, usually based on acute stress preceding the bout.

The most frequent reason given for drinking on television is a personal crisis. Drink is a means of dealing with crisis or tension in 61 percent of significant incidents. Leading actors in prime-time series drink in a crisis 74 percent of the time. Lesser characters drink for social and other reasons. Only a few "bad" characters use alcohol to manipulate other people.

Of 18 drinking and driving episodes analyzed, four involved accidents, five showed near misses, and nine were problem free. Of the six "good" characters shown drinking and driving, only one met with an accident.

Despite some memorable films and programs showing the consequences of alcoholism, perhaps the most conspicuously absent character, considering the high number of drinkers, is the problem drinker or alcoholic. Signorielli (1986) reported that the Cultural Indicators data base yielded an average of only between 1 and 2 percent of major characters depicted as problem drinkers. The television alcoholics are a dangerous but pathetic lot: they kill twice as many people as nonalcoholics but are four times as likely to get killed themselves. They are also twice as likely to fail and five times as likely to smoke or use illicit drugs.

The 5-year study by De Foe and others (1983, pp. 34-35) described some of the dramatic patterns. "Several episodes," they wrote,

> graphically dramatized the hazards of alcohol abuse, with a teenager usually depicted as the problem drinker who at the end is helped to learn a lesson. Most of the patterns, however, sent messages that would not be approved by specialists in alcohol education... : youth lusting for the time they can drink, infrequent disapproval of alcohol abuse voiced by other characters, and regular actors receiving lesser punishment for alcohol abuse than nonregulars. Others are: drinking to escape or to cope with stress or crisis; the glamorization of drinking; gratuitous drinking which makes no contribution to plot, character, or context; allowing a character no opportunity to decline a drink; and most often, heavy drinking with no indication of possible hazards.

Garlington (1977) found the world of daytime serials, turbulent and troubled as it was, also saturated with alcohol: "The soap operas averaged almost three 1-minute intervals per 21-minute program during which an alcohol-related event occurred." Lowery's (1980) study recorded at least six scenes of alcohol use at a rate ranging from about one to more than seven per hour of daytime serial, or an average rate of three per hour. She identified three patterns of

alcohol use. The first, "social facilitation," accounted for 47 percent of the drinking incidents and consisted of either "ritualistic" or "tension-reducing" functions facilitating social interaction. The second, "crisis management," accounted for 23 percent of drinking incidents and used alcohol to reduce stress or overcome a crisis. The third, "escape from reality," accounted for 30 percent of the incidents and denoted a long-term pattern to compensate for loss or stigma. These incidents were the most likely to result in undesirable consequences and serious discussions about harmful effects. On the whole, however, 70 percent of the instances of alcohol use were either reinforced or had no consequences.

"Alcoholics in the soap operas are much easier to rehabilitate than those in real life," wrote Lowery (1980, p. 837):

> The message transmitted to the audience is that problems cause problem drinking or alcoholism. The cure for an alcoholic is apparently to resolve the underlying problem. Once this has been accomplished, the alcoholic can return to his family and job—and even to social drinking—as if nothing had ever happened. Thus even escape drinking is not portrayed as a serious problem . . . . While drinking for the purpose of escaping into oblivion is shown to have punishing consequences, these consequences are not permanent, suggesting that drinking is an appropriate response to certain problems.

A thoughtful dramatic policy was reflected in the conclusions of a study of "All My Children" by Wallack and others (1984). While the rate of drinking was still almost four acts per hour, it was "presented in a realistic and accurate fashion. Social drinking is done at appropriate times and places. Drinking under pressure or to relieve stress is, for the most part, negatively reinforced, and very heavy drinking or alcoholic behavior is responded to directly."

Other Drugs

Most drug-related messages are, of course, advertisements for OTC pharmaceutical products. Hanneman and McEwen (1976) found that such television commercials occurred at an average rate of about twice per hour in prime time. They observed no antidrug messages in 2 weeks of monitoring, and they observed that "those messages *promoting* chemical use far surpass, in numbers and accessibility, those which *warn* of abuse potentials" (p. 76). In another study the same authors found that 9 out of 10 antidrug public service messages were telecast outside prime time, during lower audience availability periods.

Barcus (1976) found that more than 6 percent of all television commercials advertised OTC drugs, and more than one-third of these were for internal analgesics. In addition to the 132 drug commercials observed during the study

week, there were 17 noncommercial antidrug messages. Of 99 different drug commercials, half portrayed suffering followed by quick relief and only 2 cautioned of misuse. Smith and others (1972) included news and entertainment in their analysis and reported 10 times as many messages favoring the use of pills and other remedies as warning against abuse.

In an analysis of psychotropic drug ads in medical journals, Stimson (1975) observed social problems portrayed as individual stress symptoms to be treated with tranquilizers and antidepressants, showing mostly women in need of such treatment.

Winick and Pezzella (1976) noted a number of casual references to illicit drug use in television entertainment programs. They dealt mostly with marijuana, and mostly in a humorous context. The number of programs containing significant portrayals of illicit drug use was 56 in a 39-week period, an average of one network program every 9 days. Only seven of the programs showed drug use as a social activity, and none showed it as pleasurable. Almost four times as many programs dealt with law enforcement as with treatment.

Drugs in the News

Although surveys often identify news as the most common source of drug abuse information, few have analyzed its extent and nature. A content analysis of major metropolitan U.S. newspapers (cited by Addiction Research Foundation, 1981) revealed that 8 percent of total news space was devoted to social problems, and more than one-third of that dealt with crime and law enforcement. Health issues accounted for 17 percent (of the 8 percent), and drug abuse garnered less than 1 percent of that. But crime stories related to drugs and drug traffic occupied, as I have noted before, a large amount of space (from 11 to 19 columns a day) in such newspapers as the *Boston Globe*, the *Washington Post*, and the *New York Times* (Zinberg and Robertson 1972).

It was against the background of primary association with law enforcement, rather than health or treatment, that the drug war cycle of the late 1980s unfolded. After a slow rise in the mid-1980s, and despite the decline of overall drug use (but not of cocaine use), national media coverage of drug issues exploded in the late summer and early fall of the election year of 1986 and then suddenly declined (Merriam 1987).

The complexion of coverage also changed over time. Merriam's analysis shows that trafficking and drug busts claimed most of the press attention. In 1985 coverage rose by 80 percent over the previous year. In 1986 it nearly doubled again. Crack, the Len Bias and other celebrity stories, the "Just Say No" campaign, and the rising frustration with crime and corruption propelled drugs to become a top election issue. Shoemaker and others (1987) found that shifts in public opinion followed each cycle.

Social Dynamics

Analyses of social dynamics find the tenor of drug portrayals and coverage, and even antidrug messages, often counterproductive. Presenting drug abuse in a context of deviance, morality, and law enforcement, rather than one of cultural values and uncontrolled (and untaxed) moneymaking, media treatment lends itself to political exploitation. Young (1981) concluded that "by fanning up moral panics over drug use, [the coverage] contributes enormously to public hostility to the drug taker and precludes any rational approach to the problem." An Australian study by Bell (1985, p. 18) suggested that

> news reports confirm the view that drug consumption is the principal social issue. This might serve much the same ideological ends as explicitly blaming the victim, for it displaces complex social problems on to the consumers of drugs who are then seen as being in need of legally-sanctioned "correction," or of medical or psychological help . . . . Hence the symptoms of a drug-using society are ritualistically portrayed as the disease itself, and the social welfare and legal apparatuses are visible as the mechanisms for controlling or alleviating these symptoms.

The repressive potential and stigmatizing functions of antidrug abuse literature were explored by Gerbner (1977). The bulk of the analysis consisted of comic book images, including a widely distributed antidrug booklet used by the Department of Defense. Of the 142 persons depicted in the booklet, performing a great variety of tasks, women and nonwhites were shown only as drug addicts or as listening to white males give orders or lectures. Scantily clad female drug addicts writhed in agony, oriental belly dancers gyrated in drug-induced religious ecstasy, drug-crazed hordes of Southeast Asians rushed headlong to their deaths in futile battles. But white soldiers used drugs to relieve suffering and, if they became addicts, were treated as sick men or tragic figures. The implicit social message cultivated conventional prejudices and, as wars on drugs also tend to do, doubled as an instrument of general social control.

Large systems of mass-produced messages released into the mainstream of common consciousness constitute the record of industrial behavior in the field of culture. Studies of these message systems reveal the often implicit but binding institutional policies, pressures, and constraints that govern their production. The extent to which their consequences can be reliably demonstrated is the subject of the next section.

Consequences

Research Issues

Three major conceptual difficulties complicate and limit the empirical demonstration of media effects related to health. The first involves the sharply divergent distributional characteristics of television and other media. The second has to do with the problem of attributing specific conceptions or actions to specific and distinct types of media content. The third is the problem of causation in dealing with complex and largely culture- and situation-bound activities. Let us consider each of these problems in turn.

Media Differences

It is useful to distinguish between selectively used and relatively nonselectively used media. The selectively used media—print, film (except on television), audio and video recordings, and some cable services—require some literacy, mobility, and buying ability to be chosen by the user. Therefore, they tend to be independently selected and used during and after school age. The choices tend to reflect tastes and predispositions cultivated by the stories told and habits acquired in the home from parents, school, church, and other socializing institutions. These influences have traditionally distinguished different socioeconomic, ethnic, religious, political, and other groups.

Since the 1950s, however, a relatively nonselectively used medium, reaching all groups with essentially the same limited set of messages, has tended to erode some of these distinctions and absorb into its cultural mainstream many otherwise traditionally diverse perspectives. That medium is television.

Television watching is more like a ritual than use of any other popular medium. Most viewers watch by the clock rather than by the program. Viewing is part and parcel of stable styles of life. The amount of viewing varies inversely with income and education. The total audience for television depends on the time, the day, and the season, regardless of programming. Entertainment and information appeal to the same markets. Viewers' expressions of program preferences may reflect assumptions of desirability but bear little or no relationship to actual viewing choices (Goodhart et al. 1975). Heavy viewers watch more of everything on the air.

Children are born into a home in which the television set is on for an average of 7 hours a day. Instead of acquiring tastes and values mainly from the parents during the first 5 or 6 years of life, they are inserted at birth into a stable and repetitive symbolic environment of shows, news, and commercials designed to hold and sell the largest possible public at the least cost to the advertiser. Television tells its stories to children and parents at the same time and carries

the information embedded in them to millions who otherwise may not select it. It is, therefore, the only medium since preindustrial religion that can reach an entire community with a ritualistically used system of messages quickly, daily, and throughout life.

Single programs and isolated messages or even campaigns may be submerged in the daily and weekly rhythms of the television ritual. But its recurrent patterns of images and messages become parts of the inescapable cultural mainstream. They establish their own set of predispositions and affect preferences for other media. They blur the social, cultural, and political distinctions among otherwise diverse groups and publics (see Gerbner et al. 1986, 1982a, 1982b, 1982c, 1981).

These media distinctions have far-reaching implications for analysis, research, and action. Selectively used media are obviously subject to self-selection by users. Generally they do not reach those who do not select them. They are best understood and used as targeted vehicles conveying specific types of information to those who seek that information.

Nonselectively used media in general, and entertainment in particular, reach those who do not seek information or perceive a need or use for the information to be conveyed. For this audience, perhaps the majority of people, television entertainment is by far the most pervasive source of information. It is information, however, that may be integrated by different groups of people into different frameworks of knowledge in different ways.

Attribution and Causation

The effects of specific media messages are difficult to establish. It is even more difficult to attribute ideas to specific media content or even types of content. Media tend to cultivate stable images anchored in group norms. Conventional distinctions between information and entertainment, news and fiction, and so on, do not necessarily imply differences in learning. Imaginative stories of how things work, depicting fictional characters embodying invisible ideas and acting out hidden forces, are learning experiences at least as powerful as fragmentary accounts of events (news) or stories about value and choice (advertisements).

None of these experiences comes isolated from the others. No specific idea or act—let alone changes in otherwise stable patterns—can be reasonably attributed to occasional exposure to a single content element in isolation from its context. Therefore, it is unlikely that, for example, the effect of alcohol advertising, separated from its context and other representations, can be convincingly related to changes in drinking behavior, as the FTC demands.

An experiment can artificially expose subjects to content they may (or may not) otherwise select, and it can usually demonstrate short-range recall of

information. But such exposure is not a good test of what actually happens in the course of the daily cultivation of concepts and images through both selective and incidental exposure to media.

Media-originated ideas also reach people through other people. Expressions of beliefs, values, or tendencies to act in certain ways can rarely be reliably traced to simple single causes. Images and messages bombarding each of us most of the time from all sources, media, and types of content are inevitably intertwined in consciousness.

When large investments are at stake, proprietary research is often used to cast doubt on or to magnify uncertainties in any study. When the media themselves are interested parties, such doubts are even more likely to justify stressing disagreement among experts and selective citation or balancing of studies.

Finally, the question of causation is often raised. Which came first: exposure to a specific health-related message or the behavior pattern? With selectively used media, that question is an appropriate one, but not with regard to television. The child is born into a home in which television is a member of the family. There is little or no prior development of selectivity, although there are, of course, other influences.

In any case, causation of complex behavior patterns, like the supports of a three-legged stool, is multiple. More important than finding the elusive single cause is the demonstration of stable associations between exposure, ideas, and behaviors. No single leg makes the three-legged stool stand up, but take away one leg and it may collapse. Similarly, without cultural support a conception or behavior is not likely to become established or is likely to collapse.

Change and Resistance to Change

Culture is a system that resists change. The daily flow of images and messages cultivates stable patterns of thinking and action. Most information campaigns fail to bring about change, or even recall; they are simply absorbed into existing frameworks of knowledge.

The advertising industry wondered why it spends $95 billion a year on ads and commercials when its own survey showed that 53 percent of the more than 13,000 adults polled could not recall any specific advertiser or advertisement (*Advertising Age*, March 3, 1986). The survey revealed that among those who did spontaneously recall any advertising at all, soft drinks, fast food, and beer ranked highest. Market researchers believed that perhaps half of all advertising is "awareness advertising" but that there is little or no accurate measure of the effect of "awareness" on sales (*Advertising Age*, Nov. 17, 1986, p. 50). The Addiction Research Foundation (1981, p. 102) concluded its wide-ranging review

of the research literature by saying, "The overwhelming evidence . . . leads to the conclusion that health-oriented mass-persuasion programs have not succeeded in demonstrating lasting behavioral change."

Both tobacco and alcohol industry representatives and researchers contend that their advertising cultivates brand awareness rather than total consumption; therefore, restricting or banning ads would not affect the total number or people smoking or drinking. Tobacco Institute officials told House Energy and Commerce Subcommittee on Health and the Environment that while tobacco advertising expenditures increased, smoking by high school seniors declined (Kloepfer 1986). They reported that control of tobacco advertising in certain countries is not reflected in tobacco consumption and often rises after a ban is enacted (Boddewyn 1986). And they stressed, in something of a non sequitur, that although tobacco advertising may make smokers switch or stick to their brands, "it does not *cause* smoking any more than soap advertising causes people to bathe or detergent advertising causes people to wash their clothes" (Kornegay 1986, p. 33). Another researcher speaking for the industry summarized studies showing that attitudes developed while growing up with parents, peers, and older siblings are the most important determiners of the decision to smoke (Blackwell 1986). Of course, none of these arguments addresses the issue of the media's role in contributing to (rather than single-handedly causing) and cultivating relatively stable patterns of thinking and action.

The leading industry arguments of brand name cultivation and the theory of "mature" markets actually confirm rather than deny (as they are intended to do) the powerful consequences of steady exposure. Constant innovation and plugging of brand names is of course a way of saturating a market by targeting a large variety of ages, tastes, and styles and developing a niche for every group. The mature market theory takes saturation as its starting point and advances the argument that no change in that market means advertising has no effect, at least in terms of total numbers of consumers.

A leading exponent of this theory is Scott Ward, professor of marketing at the Wharton School of Business at the University of Pennsylvania and a perennial expert witness for the Tobacco Institute at congressional hearings on bills to ban advertising. In the 1986 and 1987 hearings before the House subcommittee on Health and the Environment, Ward (1987) argued, somewhat inconsistently, that "the role of advertising for mature products is to keep consumers who use that product loyal to the brand being advertised or to prompt consumers of other brands to switch." Ward cited his own and other studies claiming that tobacco advertising does not by itself increase the total number of smokers.

A mature market is stable by definition because it assumes market saturation for the particular product. The task of advertising and promotion is to keep it that way. That task can be accomplished only by the constant replacement of

old smokers by new, the fending off of competing product appeals, and the minimizing, neutralizing, and countering of health messages. Young people and other less mature markets must be targeted and converted to being consumers of the product. Other influences are also at work and may at times be instrumental. But they are varied and conflicting, while advertising contributes the steady, positive common environment in which decisions are made.

In fact, even brand advertising has been found to spill over to competing brands (Kamen 1987) and help total sales (Miller et al. 1987). A West German study also found that advertising has a significant impact on cigarette sales (Leeflang and Reuijl 1985). Indeed, if one were to take seriously the claim that cigarette advertising merely supports already established habits, one would have to wonder why its limitation warrants such industry concern.

Wallack (1983a) noted several reasons for the failure of many prevention and information campaigns. They included inadequate models of behavior change, a narrow definition of the problem, a focus on the individual instead of culture as the target, and unrealistic expectations.

Scare tactics, sources with obvious vested interests, provocative arguments unwittingly running up against strongly held norms, and exposure of naive populations to new information against hitherto nonsalient practices can all result in a boomerang effect. An experiment testing antiamphetamine and antibarbiturate radio messages on groups of high school students found the respondents became significantly less, rather than more, negative about these substances after hearing the message. The researchers (Feingold and Knapp 1978, p. 63) suggested that "well intentioned campaigns and agencies may be unwittingly nudging (if not pushing) drugs through their drug abuse information programs."

Wallack (1981) reviewed efforts resulting in similar boomerang effects in the areas of smoking, drinking, other drug use, and drunk driving. He noted the glamorization side effects of fear appeals and concluded that "the effects of public education are largely limited to increasing knowledge and reinforcing established attitudes and behavior patterns" (p. 229). In another study, after a month-long radio campaign against drug and alcohol use in "media city," the researchers found that the adolescents of the control city (who did not receive the campaign but were otherwise exposed to the usual media content) were still more, rather than less, knowledgeable about sources of alcohol and other drug information (Morrison et al. 1976).

Prevention and behavior-change campaigns are up against the daily cultivation of stable cultural patterns. They can be best discussed, therefore, in the context of those patterns.

Learning About Smoking

The studies of cigarette advertising reviewed in the previous section confirm that children in America grow up surrounded by images that portray cigarette smoking in a positive and attractive light. We can assume that children learn this message well. Roberts's (1980) review of studies concluded that children learn from advertising at an early age. Young children do not distinguish information from persuasion and are particularly vulnerable. Aitken and others (1985) reported an experiment in which children of different ages were shown a holiday travel ad that contained the imagery of a cigarette ad but no mention of cigarettes or the brand. They found that 20 percent of 6-year-olds already recognized the brand. Most secondary school students (91 percent) identified it as a cigarette ad and responded as adults do.

Once people actually become smokers, their perceptions are affected by the habit. Studies examining the relationships between knowledge of the link between smoking and cancer and one's own smoking behavior shed some light on mechanisms of evasion and rationalization. Lane (1959) found that half as many smokers as nonsmokers watching a television program on lung cancer accepted the evidence linking smoking to cancer. A closer look showed that the more smokers rejected the link to cancer and the more they said they liked smoking, the less they were inclined to watch the program. O'Keefe's (1971) survey of two groups, high school students and adults, found that although most had seen antismoking commercials, only half could recall specific messages, and smokers in both groups were least likely to believe they would be effective.

Another study examined more directly how teenagers perceived the effectiveness of both smoking and antismoking messages (Monismith et al. 1984). The researchers reported that tobacco ads were effective in cultivating the desire to smoke among half of smokers and 14 percent of nonsmokers. Most teenagers were aware of the dangers of smoking, but twice as many smokers as nonsmokers found antismoking messages "useless" and "boring."

Antismoking campaigns have to be seen against the pervasive environment of prosmoking messages and images. To be successful, antismoking projects require broad cultural efforts or personal involvement of some sort, rather than isolated campaigns. An example of a broad media campaign is the Stanford Heart Disease Prevention Project reported by Maccoby and Farquhar (1975). A small experimental community receiving intensive mass media exposure to messages about diet and smoking did almost as well as a control community that also received personal instruction in reducing the risk of heart disease. Another successful effort was an intensive, 15-month, all-media antismoking campaign in Austria that resulted in a 7-percent drop in the number of persons who called themselves smokers and a 2.2-percent decline in tobacco sales

(Gradler and Kunze 1984). An ongoing campaign in France had similar results (Cohen-Solal 1982).

Similar campaigns, perhaps less intensive, failed to achieve significant results. However, the Scandinavian countries that have enacted comprehensive smoking reduction programs coupled with advertising bans report decreases of up to one-half the number of young smokers.

In a test of the theory that active personal involvement is required for effective communication that goes against the grain of general culture, Goldberg and Gorn (1982) involved teenagers as consultants and change agents in an antismoking campaign of films and lectures presumably directed at younger students. The teenagers actively involved scored higher on tests of negative attitudes and intention about smoking than a matching group exposed to the same messages but not actively involved. Similarly, a test of the voluntary use by adolescents of a computer program providing health information, including information about smoking, showed some promising results (Hawkins et al. 1987).

It is clear that favorable images and messages about smoking are prevalent in our culture. Their influence on media policy and on those who grow up with them seem to be able to deflect or overwhelm countermessages. The limited effectiveness of antismoking campaigns has to be seen in light of what they are up against.

Powerful images, assimilated even before a child learns to read, establish norms of desirable behavior to which there is no equally compelling cultural challenge. Images of the happy, sexy, healthy, young smoker signaling independence, adventure, and adulthood need no literacy or information seeking to absorb. They are visible in newspaper and magazine ads, posters, billboards, and sports- and other youth-oriented events. These messages both initiate and legitimize or reinforce the attractiveness of smoking.

By contrast, information about the deadly consequences of smoking is relatively rare. It requires both literacy and active information seeking to find the information, let alone assimilate it. As long as that imbalance exists, we are marketing death on a cultural assembly line, especially targeted at the most vulnerable groups of people in our country and the world.

Learning About Drinking

Some cultures introduce children to drinking in infancy (Breitenfeld et al. 1973); others discourage or even forbid it. But most children learn about it from family and friends, and nearly all encounter it in stories. Alcohol is, as we have seen, inescapable on television.

In a laboratory experiment Futch and others (1984) investigated how fourth-grade children might respond to specific problem-solving tasks after watching drinking in various contexts on television. Ten-minute videotapes from a popular prime-time show ("M*A*S*H") portrayed drinking alcoholic and nonalcoholic beverages in circumstances of enjoyment or tension. After the tapes were shown, hypothetical problem situations and possible solutions were presented. The children who saw the alcohol-drinking tape rated the solution using alcohol as more appropriate than did the children who saw the nondrinking version. In giving their reasons, the children who saw the "tension drinking" version of the alcohol drinking film were especially articulate in reporting that alcohol was used to make the characters feel better, to help them forget their problems. The results were interpreted as showing how children may develop expectations for alcohol use and habits.

In general, experimental studies of exposure to alcohol (or other) messages show at least short-term effects. Brown (1978) showed a group of adult social drinkers slides of alcohol ads and then asked them to perform a 20-minute drink recognition and preference test. He found the ads increased not only recognition but also consumption even of the nonpreferred alcoholic beverage. Kohn and Smart (1984) screened videotapes of soccer games with and without beer commercials. Both groups of viewers had access to snacks and drinks. The beer commercials increased consumption of the advertised beer among those who were exposed to them. Atkin and Block (1983) found that celebrity endorsements also resulted in more favorable ratings (especially among teenagers) than did beer commercials without celebrities.

Large-scale surveys provide more broadly representative responses under more natural conditions. In one of the most extensive series of studies, Atkin and his collaborators assessed the relationships between exposure to alcohol advertising on television and other media and a variety of attitudes and behaviors of both young and adult respondents (Atkin 1980; Atkin and Block 1981). They reported that the average respondent was exposed to magazine ads for distilled spirits 11 times per week, and the rate was highest in the years immediately after high school. Beer and wine commercials on television were recognized by four out of five respondents, who reported seeing each about five or six times a week, most often during and immediately after the high school years.

Respondents highly exposed to alcohol ads and commercials recognized brand names and attributes significantly better than those not so exposed. The more highly exposed respondents also tended to perceive drinkers as more friendly, relaxed, fun loving, happy, manly, sophisticated, and good-looking. They also gave a higher estimate of the typical amount of alcohol consumed by the average person than did the less exposed. Similarly significant positive correlations were found for attitudes toward drinking measured by agreement with such state-

ments as, "It's OK for a teenager to get drunk every once in a while," "alcohol helps people relax and unwind," drinking will "help you get away from your ordinary situation," and so on.

In a study of excessive and hazardous drinking, Atkin and others (1983) found "high exposure" respondents not only drinking nearly twice as much as "low exposure" respondents but also worrying more about it (18 percent compared to 12 percent) and getting into trouble more at school or at work because of drinking (8 percent vs. 3 percent). The more highly exposed respondents also reported more often driving while drunk (39 percent vs. 28 percent). The researchers noted that such correlations do not suggest advertising as the single cause. The application of various statistical controls showed that the habit of drinking itself, various demographic and interpersonal factors, and the exposure to alcohol advertising form a stable cluster of self-reinforcing relationships with alcohol-induced problems and hazards. That a small but significant "relationship remains after drinking is partialled out," they observed, "further suggests that advertising has an impact beyond sheer drinking, perhaps by producing a more accepting attitude toward heavy or hazardous consumption" (p. 323).

Having noted in earlier studies that adolescents may be particularly susceptible to suggestion and to experimentation with alcohol, Atkin and others (1984) surveyed young teenagers in three States to see what influenced them most. They found that advertising exposure was the most significant predictor of liquor drinking, with peer influence second, whereas the relationships were reversed with beer drinking: peer influence was the strongest correlate and advertising second. For wine drinking, peer and parental exposure led the correlations. Separating respondents into high and low ad exposure groups, the researchers found that those who were highly exposed scored higher on all consumption measures, tried many more brands, and (if nondrinkers) were more likely to plan to drink in the future.

The researchers again noted that such correlations (even with demographic and other factors controlled) do not necessarily indicate causal direction as much as the strength of association. Nevertheless, exposure to ads usually comes before drinking, and the intention of highly exposed nondrinkers to drink in the future also suggests advertising as a likely antecedent.

Despite the disclaimers and cautions, the studies by Atkin and his collaborators were criticized in reports on a series of studies supported by alcoholic beverage industry organizations. Strickland (1982, 1984a, 1984b, 1985) claimed to have found no significant relationship between advertising and alcohol consumption. In a critique of the Strickland studies, Watkins (1985) noted vague and weak measures of consumption and pointed to data hidden in the reports. For example, young people who expressed a high desire to be characters in alcohol ads did report a higher level of drinking than those who did not identify

with such characters, but these data received no attention in the reports. Watkins pointed out that Milavsky and others' (1976) longitudinal study of the relationship between drug advertisements and drug use supports the case for a causal relationship between ad exposure and the use of advertised substances among youth.

Atkin's own review (1984, p. 70) of more than a dozen effects studies (including McGuiness 1979; Ogborne and Smart 1980; Strickland 1984; and Atkin and Block 1983) concluded that:

> alcohol advertising exerts an influence on the frequency and quantity of adult alcohol consumption. The degree of impact is not strong, because at least a part of the association between exposure and drinking can be attributed to reverse causation, and the raw correlation is reduced when third variables are controlled. A quantitative estimate of the contribution of alcohol advertising is difficult to calculate, but it is likely that ads account for a 10-30 percent increase in the total amount of alcohol that would be consumed without advertising, based on correlational and self-reported effects data.

Associations between advertising and adolescent drinking, heavy drinking, and favorable attitudes toward drinking support similar conclusions.

Attempts to relate advertising to actual, rather than intended or reported, alcohol consumption have been less successful. Consumer behavior responds to a variety of economic and social factors such as price, income, community standards, and demographic trends in the population. Nevertheless, Cowling and others (1975), Comanor and Wilson (1974), Peles (1971), and Leeflang and Reuijl (1985) reported econometric studies that showed some relationships between advertising expenditures and sales of some alcoholic beverages and of cigarettes.

Studies of consumption in countries that enacted bans on liquor advertising Finland, Norway, Sweden, and The Canadian Provinces of British Columbia and Manitoba) have come to conclusions the interpretation of which depends on relating the findings to general trends in consumption. For example, in those countries where consumption levels were increasing, the ban seemed to have slowed the increase (Watkins 1985). But no clear declines in drinking were directly attributable to the advertising ban alone.

Pervasive patterns of traditional behavior deeply embedded in a culture and cultivated daily by a great variety of images and stories cannot be expected to respond quickly or sharply, if at all, to the withdrawal of one of many sources of cultivation. Even concerted antidrinking campaigns, as in the Soviet Union, ran into stubborn resistance and had to be modified. The lessons of advertising bans are mixed and, of prohibitions, wholly negative. Reducing advertising control over a wide sector of the youth culture, producing images and role models

that challenge conventional patterns, and saturating the community with health information, but not criminalizing behavior attractive to many, may be required for effective control of the damage alcohol causes to people and society.

Learning About Other Drugs

Stetler (1973) found that while drug abuse in the community he studied rose sharply, physician prescribing of psychoactive drugs had lagged behind overall prescription growth trends. Reporting for the Pharmaceutical Manufacturing Association, he interpreted these results as showing that legitimate drug prescription and promotion are unrelated to illicit drug abuse.

Studies of the effect of advertising OTC drugs on the consumption of illicit substances—a difficult task—found no direct influence. Large-scale surveys by Milavsky and others (1976) and Robertson and others (1978, 1979) failed to find any direct link between exposure to drug commercials and illicit drug use. Whatever excesses pill-popping ads might promote, there was no evidence that the use of narcotics was among them. However, teenage respondents to surveys by Kanter (1976) reported that advertising for some pharmaceuticals might lead to some product misuse, especially by younger (fifth-grade) students. The study also found that users of illegal drugs were more receptive to such advertising than nonusers.

A study of teenagers by Atkin (1978) found that exposure to proprietary drug ads affected children's views of sickness and medicine in general but not of illicit drugs. There was some indication that receptivity to drug ads may relate to an attitude of defiance or rebellion: those most receptive tended to be healthy, bright, higher status youngsters whose parents disapproved of medicine usage.

Where do young people learn about illicit drugs, and what do they learn? A large-scale Canadian study (Fejer et al. 1971) found that nearly 6 out of 10 high school students learned about drugs from the news media with friends, school and church, and family (in that order) far behind. The influence of the media depended on the inclination to use drugs. Users naturally relied more on their own experience or on friends. Half of those who thought marijuana was harmful attributed their information to the media, whereas those who thought it was safe (one in five) attributed it equally to media and friends. The study suggested that media are not only the widest repetitive source of drug information but also the most trusted (especially by nonusers), precisely because they are seen as objective, expert, and impersonal, "less concerned with preventing drug use and more with providing information. In other words, close personal relationships on controversial topics such as drug use may lead to less trust between source and receiver than when such a relationship does not exist" (p. 241).

A survey of American college students, 94 percent of whom had used marijuana, also found that "media content and drug abuse ads do account for

the greater amount of initial awareness about drugs" (Hanneman 1973, p. 188). With marijuana and amphetamines, friends and media generated about an equal degree of awareness. "Drug users exist in a drug culture, a milieu with its own reference norm and reinforcement," the survey concluded (p. 189). Media call attention to drug abuse mainly through crime stories, sports and other celebrity overdose stories, and antidrug abuse messages. These messages may be parts of the socializing context of the distinct identity of the drug culture, a symbolic no-man's-land in which consumer values and conventional norms both mesh and clash.

This review of research on prevention, incidental learning, and advertising effects illustrates the difficulty of measuring and attributing long-range effects to specific messages or even broad campaigns within the flow of complex message systems. One direction for research on the dynamics of effects, and particularly on the sources of change and resistance, leads to the mainstream of that flow, television.

Television is the largest single source of information about smoking, drinking, and drugs, as well as other health-related behaviors. Single programs and isolated messages may be submerged in its flow, but regular exposure to its coherently composed and repetitively presented world of programs—news, commercials, and entertainment—has been found to cultivate a stable conception about many aspects of the real world (e.g., Gerbner et al. 1986). For example, although television viewing seems to promote confidence in doctors, it also perpetuates poor nutrition and general complacency about health among heavy viewers (Gerbner et al. 1982a). Viewing is also associated with the erosion of religious prohibitions against smoking and drinking among Mennonites (Umble 1987). Further research on television's role in the cultivation of relevant conceptions and actions could provide the general background against which to trace processes of socialization regarding smoking, drinking, drug use, and other health-related behaviors.

In a broader sense, however, consequences reach beyond effects on attitudes or even actual consumption. The cultural mainstream (including advertising) supports industries, shapes policies, affects large organizations—both public and private—and upholds ideologies. Dorn and South (1983) pointed out that the promotion of new products, the cultivation of brand loyalties, and the competition for those who would switch loyalties do more than stabilize markets and enhance profitability. They also help subsidize commercial media to confirm the values and associations that provide a suitable context for advertising messages. Future effects research should be attentive to the cultivation of lifestyles and other associations, as well as to influences on consumer action.

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CHAPTER 4

Drug Availability in a Public Health Perspective

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Introduction

James F. Mosher focuses on another key aspect of environmental approaches to prevention: the availability of three chemical substances—alcohol, tobacco, and marijuana. Mosher establishes the importance or availability policies in shaping drug use, problems, and social norms. He contrasts availability policies for two legal drugs (alcohol and tobacco) with those for an illicit drug (marijuana) and discusses the limits of each. For legal drugs, governmental policy has, in general, expanded availability, responding to market forces that seek increased sales. Making a drug illegal limits availability but also creates unintended adverse social consequences and limits policy options. Mosher contends that new regulatory and legal policies should be considered that address all levels of drug availability.

Public policies affecting the availability of nonmedical drugs and alcohol in the United States have a widely fluctuating history. Particularly when policies are compared across differing types of substances, there appears to be little logic in their structure and administration. Extremes have been reached at both ends of the spectrum, from very strict controls on availability to policies that actively encourage drug use. In the case of alcohol, the two extremes have been reached with the same drug in a relatively short period of time.

The policy fluctuations are accompanied by a variety of cultural and societal explanations or myths justifying particular actions. In general, the justifications and assumptions have not rested on public health theory or on the relative dangers of the drugs involved, despite the adverse consequences drug use in the United States has on public health. Rather, economic, political, and other considerations not directly related to health concerns have tended to guide drug availability policies. Ignored in the ongoing public debates and policy shifts are the wide array of policy options that can affect the availability of drugs in society and their importance in designing a comprehensive approach to preventing

drug-related problems. This chapter, which is grounded in a public health model of prevention, therefore offers a new approach to the drug availability issue.

In this chapter I will limit my analysis to three nonmedical drugs: alcohol, tobacco, and marijuana. These drugs have been chosen for three reasons:

- Because of space limitations, a subset of the total drug market had to be chosen. Nonmedical drug use is the primary focus of this volume. Thus, even though prescription and OTC drugs have been used for nonmedical purposes, availability policies are grounded in medical rationales and fall beyond the scope of this analysis.
- Alcohol, tobacco, and marijuana constitute three of the major nonmedical drugs of choice among youth.
- These drugs provide a basis for comparing legal and illicit drugs, a basic dividing line in availability policies.

The chapter is divided into three sections. The first provides an overview of drug availability policies and their role in public health policy in general. The second section outlines the history of availability policies for tobacco and marijuana in the United States (the history of alcohol policy is not included here because of space limitations and the large quantity of literature on the topic). The third section identifies the various policy options, reviewing research on their impact and outlining future research and policy agendas.

Drug Availability and Public Health Policy

A classic public health model for approaching the prevention of a particular public health problem examines the interaction of three key components of the problem: environment, agent, and host. To be effective, prevention programs must address all three dimensions. For drug-related problems, the host is the particular drug user, the agent is the drug itself, and the environment is the social and physical settings where drug purchases and use take place. The term "availability," as used here, refers to policies that affect the physical conditions under which a drug can be purchased or otherwise obtained for use. Thus, both agent and environment variables are involved, with a major emphasis on environmental conditions for obtaining the drug in question. Of particular interest are price and tax policies (primarily because of research indicating that these variables have a major impact on use), controls on retail sales, and controls on production. Because prohibitions on use of a drug may affect these variables indirectly, discussion of prohibitions is also included. However, the focus is on policies affecting sales rather than use.

Prevention policies for legal drugs have focused almost exclusively on the host, through an emphasis on education and deterrence. Illicit drug prevention policies, on the other hand, rely at least formally on restricting availability. Until recent times, however, most enforcement efforts (at least regarding marijuana) have been aimed at individual users rather than at the availability structure. Thus, even for marijuana use, prevention policies have focused on individual rather than agent or environmental variables.

Focusing on the host has several shortcomings. Most important, it tends to place the blame or responsibility on the individual, which in turn leads to ignoring the environment within which individuals make behavior choices (see Crawford 1977 and McKinlay 1979 for discussion). Drug availability can itself be seen as a form of education; how, when, where, and at what price a drug is available in a society have powerful influence on the consumer's understanding of the drug's appropriate uses. Thus, the lack of attention to agent and environmental aspects of drug use will result in undercutting host-oriented strategies such as education programs. This result has been well described with regard to alcohol policy by Wallack and colleagues (1982) and others.

Availability strategies, then, need to be framed within an overall context of prevention policy in a way that reinforces other efforts. Portrayals in the media, school-based education programs, other educational efforts (such as professional training), advertising policies, mass media campaigns, and so forth will all be more effective if they are coordinated with each other and with availability policies.

This framework can be taken a step further; early identification and recovery-treatment efforts (secondary and tertiary prevention) can be undercut by availability policies that put populations in recovery at risk. Those completing formal recovery-treatment programs are much more likely to remain chemical free in a social and physical environment that supports an individual's choice to abstain. An alcohol-saturated work environment offers a classic example of conflicting environmental messages that can negate treatment. Roman and Trice (1970) conducted a study of recovering alcoholics who had become alcoholic in corporate sales settings. Drinking was expected behavior on the job. Those interviewed reported an inability to return to their job settings because of the difficulty of staying sober in that environment. Considerations about the availability of alcohol on the job thus can be perceived as an important aspect of a company's employee assistance program (e.g., Harrington et al. 1987; American Assembly 1985).

Total Marketing

The importance of the interaction of availability policies with other prevention and recovery-treatment policies is also well illustrated by examining

standard marketing theory and practice. The legal nonmedical drug industries (tobacco and alcohol producers) use what is termed "total marketing" to promote sales. Pioneered by the tobacco industry earlier in this century and later adopted by beverage and other corporate marketers, total marketing has become a basic concept for increasing sales, maintaining market shares, and opening new markets (Cowan and Mosher 1986; McBride and Mosher 1985). Total marketing consists of four strategies—the four P's of promotion, product, price, and place—that are developed and coordinated in order to maximize the exposure to the product in a positive light to the most likely consumer groups (McBride and Mosher 1985). Promotion consists of advertising, sponsorships of sporting and music events, and other activities that publicize the product. Each company develops a "product line" of different types of the drug (super premium, popular beers, wine coolers, and so on), which are designed, in coordination with promotional campaigns, to appeal to particular subpopulations. Each of the items in the product line is priced to match the image of the product, with the least expensive product at the lowest possible price. Finally, the product is produced and made available at retail outlets and in retail packaging that make it as convenient as possible to purchase for those being targeted.

A major theme of the total marketing approach is to make a product an "any occasion" item. In the case of tobacco and alcohol, doing so means creating an image for the drugs that suggests consumption any time, any place, breaking down traditional taboos or restriction on use in particular settings or times or by particular subgroups, such as women. As part of this push, alcoholic beverage marketers have increasingly viewed their products as part of a larger beverage market, with beer, wine, and distilled spirits competing against nonalcoholic beverages for the approximate 2 gallons per capita of liquid consumption each day (Cowan and Mosher 1986). The marketing practices of the soft drink and alcoholic beverage marketers have in large measure converged in this process.

Examples of recent total marketing efforts abound in the alcohol industry. Wine coolers, for example, are a new type of beverage aimed particularly at women and young people. With its sweet and light taste, low prices, and convenient packaging, the wine cooler competes with beer and soft drinks for occasions such as picnics and sports events, where traditional wine products are unlikely to be consumed. Wine cooler ads promote just these types of uses. Packaging has taken on a beer or soft drink look, and the industry is successfully obtaining access to convenience stores and supermarket outlets to make purchases easier. This coordinated marketing effort has been highly successful; the market has grown at a phenomenal rate since wine coolers were introduced in 1983 (a tapering off has been occurring since 1987). Availability is a critical variable in this marketing approach, and the legal drug industries understand and employ effective availability strategies to promote drug use. They are very sensitive to enhancing product appeal by means of creating social and physical environments conducive to drug use—which is precisely the purpose of mass

advertising and underlies the strong industry opposition to increased taxes and restrictions on availability. The industry clearly believes that a social and physical environment that discourages drug use will do exactly what would be expected: it will decrease use.

Total marketing operates on national and international levels. It requires massive investments to conduct national television advertising and other promotional efforts (such as sports sponsorships) and to create sophisticated distribution channels and large lines of products. Thus, only large firms are able to compete effectively. This situation has led to highly concentrated markets. The tobacco and beer industries, for example, are dominated by three firms, with Philip Morris playing a major role in both because it owns Miller Brewing Co. Together, Philip Morris, Anheuser Busch, and RJR Nabisco control nearly 60 percent of all beer and cigarette sales. Distilled spirits and wine industries are also controlled by a limited number of firms, and there is considerable cross fertilization among them, as well as with the beer and tobacco industries. The national firms have been able virtually to eliminate regional companies, which were the norm in previous eras. This concentration of power has impiications not only for marketing practices but also in the political sphere. The large firms function as effective national lobbies and are thus able to protect their economic interests; therefore, they are less likely to respond to local or regional concerns (Dorn and South 1982; McBride and Mosher 1985; Cowan and Mosher 1986).

Prevention policies need to be shaped with the same "P" variables of total marketing in mind. "Promotion" translates to media campaigns and education—providing the general population, often through targeted approaches, messages regarding the risks of drug use. Pricing is affected directly by tax policies; product lines are regulated by restrictions on beverage or product content. "Place" constitutes the physical availability controls on production, trade, and sales found at the Federal, State, and local levels. These policy options need to be coordinated to address the total marketing strategies of the industry. The need is particularly acute in the case of policies affecting young people, who are most likely to react to societal expectations of adult behavior.

Of course, total marketing (and its converse, total prevention) is not a perfect system and cannot dictate consumer demand. There are many examples of marketing campaigns that failed because of faulty forecasts of likely consumer reactions. Illicit drugs such as marijuana are not promoted at all by public policy, and prices and places of sale are largely outside of Government control. Yet marijuana sales can flourish in response to consumer demand for the product, often at very inflated prices and despite extreme difficulty in purchasing.

As we develop prevention policies—particularly those regarding availability—we must recognize that there is a consumer demand for nonmedical drugs. Supply variables interact with and can help shape demand but will

not eliminate it. The bigger the demand, the more likely it is that unintended consequences will result from severe supply restrictions. The demand for highly addictive drugs creates a particularly high risk of alternative, illegal availability structures developing in the wake of strict controls of legal availability. This supply-demand dynamic underscores the need for demand strategies to be developed in conjunction with supply strategies such as price and availability.

Drug availability policies, then, play a key and integral role in prevention policies generally. They provide an opportunity to shape consumer demand; in particular, they influence how much and in what situations a drug is used. Designed effectively, they can lower drug use generally, can lessen the risks of adverse consequences when drugs are consumed, and can promote educational and recovery-treatment efforts. Unfortunately, prevention and recovery-treatment policies have not been developed from a public health rationale.

As a result, they have too often been counterproductive or have created serious unintended adverse consequences. The next section reviews this history of policy fluctuation and failure.

The History of Tobacco and Marijuana Availability in the United States

Tobacco

The most distinctive aspect of tobacco availability in the United States concerns the massive expansion of cigarette use in the early and middle decades of the 20th century. Almost no government regulations were promulgated during this period to restrict this expansion; on the contrary, the Federal Government actively encouraged it through a variety of actions. Only since 1975 has tobacco availability been viewed as a public health issue by any major segment of society, with many restrictions proposed and some measures instituted at all governmental levels. Despite this change in approach, however, many governmental actions expanding availability remain in place.

Physical Availability

Two critical inventions before 1900 revolutionized the tobacco market. In 1881 James A. Bonsack introduced the cigarette machine, which could produce more than 200 cigarettes per minute (Tennant 1950). Before the invention, cigarettes were rolled by hand, seriously restricting their availability. The machine was accompanied by a switch from foreign to domestic tobacco, and it foreshadowed the cigarette becoming a mass-marketed product, far surpassing cigar and pipe tobacco consumption.

A second invention was necessary before the marketing campaign could be contemplated, however: the match, first invented in 1896 but not considered safe until 1912. Before the invention of the match, consumers would frequent cigar stores to light their cigarettes from a gas or oil lamp (Sobel 1978). By 1920 most cigarette purchases included a free matchbook. As stated by Sobel (1978, p. 67): "Matches altered the way cigarettes were smoked, encouraging their consumption during odd moments in the day; in effect, they transformed cigarette use from a thoughtful exercise into an almost unconscious habit."

The invention of the cigarette machine and match contributed to a major increase in consumption, from 0.5 billion in 1880 to 2.2 billion in 1888, 18 billion in 1914, and 54 billion in 1919 (Sobel 1978). The size of the cigarette pack was increased from 10 to 20, and by the end of the century a pack-a-day habit was considered about average. Annual per capita consumption increases paralleled the total production figures: 134 in the 1910-14 period, 310 in 1915, 426 in 1919, and 700 in 1925. Such figures were unimaginable in the 19th century because of the inability to make cigarettes conveniently available to the public.

Active governmental encouragement of tobacco consumption through expansion of availability channels occurred during both world wars. Cigarettes became associated with the positive values of quiet dignity, courage, and dedication of the model soldier and became an essential part of the soldier's life (Sobel 1978). As stated by General Pershing during World War I (reported in Wagner 1971, p. 44): *"Tobacco is as indispensable as the daily ration; we must* have thousands of tons of it without delay." The U.S. Army became a major contractor with tobacco companies, many companies distributed free cigarettes to soldiers as a public service, and citizen groups sent shipments of cigarettes overseas (Sobel 1978). A similar response occurred during World War II. President Roosevelt declared tobacco an essential crop, and tobaccogrowers (along with wheat and corn farmers) were granted deferments (Sobel 1978). Major tobacco companies targeted the military market, given the heavy consumption by soldiers (twice the per capita rate of civilians) and the opportunity to recruit new smokers (Sobel 1978).

Overall consumption rates rose dramatically during both wars and made smoking an acceptable habit in civilian populations. Most striking, women began to smoke. Before the end of World War I, most women's colleges banned smoking and many cities passed ordinances prohibiting women from smoking in public (Schudson 1984). By the mid-1920s, these bans were being lifted and public transportation facilities began to accommodate women smokers. A tobacco shop catering exclusively to women opened in New York City in 1922, only 14 years after passage of an ordinance that banned women from smoking in public (Schudson 1984).

How much the marketing efforts of the tobacco industry contributed to the changing smoking habits of women has been widely debated (see Schudson 1984). One thing is clear, however: changes in availability played a central role. The tobacconist shop of the turn of the century was clearly a male domain. With the changing social mores came new outlets for tobacco purchases. Cigarette cartons became available in candy stores, department stores, and supermarkets, and the tobacconist shop was transformed into a variety goods outlet offering many nontobacco items for the general population (Kolodny 1953). These changes created a massive increase in availability, promoting the acceptability of cigarette smoking in American life and making cigarettes readily accessible to all segments of the population, including women. More recently, new brands of cigarettes such as Virginia Slims have been created that are aimed specifically at the young female market.

Perhaps the most revolutionary aspect of tobacco availability is the use of vending machines at point of sale, first introduced in 1926 (Marshall 1954). By 1953, nearly a half-a-million cigarette machines existed, selling more than 3 billion packs of cigarettes a year, second only to sales in food stores (Greene 1953). The upward trend continued through the mid-1970s; in 1973 more than 900,000 vending machines were in operation, selling almost 5 billion packs. Vending machines made it possible to sell tobacco almost anywhere—in hotels, restaurants, train stations, and so on—and the vending machine industry developed lists of the best locations to maximize sales (Marshall 1954). Vending machines require no salesperson. Thus is there no regulation of the time of purchase or the identity of the purchaser, despite laws in most States prohibiting sales to young people. The existence of vending machines throughout our physical environment is a major inducement to impulse smoking (Marshall 1954). Wholesalers, recognizing their value, were the main promoters of the machines; in 1952 they owned half the machines in existence.

Vending machine use declined after a peak in the 1970s, at least partly because of rising prices, the economic recession, and a general decline in consumption. Cigarette pack prices of more than $1 were a major deterrent to vending machine use because of the need for so many coins. The industry responded by introducing generic brands, new packaging, and other new availability strategies. Generic cigarettes, sold at prices substantially lower than brand names (at least $2 less per carton) have been the only growing segment of the market, moving from less than 1 percent in 1982 to 3 percent in 1983, with continued growth predicted (Tobacco International 1983). One generic brand, named Coins, was specifically designed for vending machines (*Smoking and Health Reporter* 1984). The 25-cigarette pack (the traditional pack contains 20) was introduced as a means to increase consumption among existing smokers (Gloede 1984). As noted by one tobacco analysis (reported in Gloede 1984, p. 37), the industry is "taking a page out of drink (alcoholic beverage) marketing—the idea that consumption goes up with availability" (i.e.,

demand responds to supply). Tobacco companies have supplemented these innovations with free distribution of minipacks at various public events and on city streets and with a proliferation of new name brands, which are marketed to specific subgroups of the population through mass promotional campaigns (Tye 1985).

The late 1970s and 1980s also brought new directions in tobacco availability policy (Tye 1985). By 1987 laws in 32 States restricted smoking at public work sites and 23 States had laws restricting smoking in restaurants. Airlines now prohibit smoking on all regularly scheduled commercial flights with scheduled flight times of 2 hours or less (Public Law 100-202). Tobacco availability in most public hospitals has also been restricted or banned (U.S. Office on Smoking and Health 1989). All these restrictions have been hotly contested by the tobacco industry (Tye 1985).

The increasing interest in availability policy has occurred at the same time consumption rates are declining. Per capita consumption peaked in 1973, at 4,148 cigarettes per year for persons aged 18 years and older. Per capita figures have declined steadily since then, to 3,454 in 1984, and absolute numbers of cigarettes produced have been declining since 1981. The number of current smokers has also declined steadily. In 1986, 26.5 percent of the population of adults aged 17 and older were smokers, down from more than 40 percent in 1965 (U.S. Office on Smoking and Health 1984; Tobacco-Free Young America Reporter, 1987). It is interesting that the history of the physical availability of tobacco products and its link to consumption have not been researched systematically in either the trade press or in academic journals. Such events as the introduction of cigarettes into supermarkets and the decision to put ashtrays in automobiles are not documented. This omission indicates the lack of any public policy focus on tobacco availability, despite its importance to the dramatic increases in consumption during the century and the resulting rise in health problems.

Tax and Price Policies

Traditionally tobacco has been a cheap commodity in the marketplace, a critical variable for a product that is purchased repeatedly and routinely. In fact, a price support system (described in the following paragraphs) has been in effect in order to maintain prices at levels that guarantee profitability and stability for the industry. Cigarette packs in the 1920s were priced at less than 15 cents a pack (Sobel 1978); during the Great Depression the industry introduced "loosies"—cigarettes priced individually at 1 cent apiece for those who could not afford a pack (Sobel 1978). Prices have increased steadily since that time, although (until 1982) at a rate generally slower than the Consumer Price Index. Since 1984, cigarette prices have experienced a sharp increase (see table 1).

Table 1. Consumer price index for cigarettes and all items for all urban consumers, 1960-88 (1967 = 100)

Year	Cigarettes	All items
1960	82.4	88.7
1965	91.7	94.4
1970	121.2	116.3
1975	153.9	161.2
1980	202.6	246.8
1984	310.0	311.1

Source: Office of Smoking and Health 1989 and *National Data Book and Guide to Sources, Statistical Abstract from the United States 1988*, 108th Edition, U.S. Dept. of Commerce, Bureau of the Census, U.S. Govt. Printing Office, Washington, D.C., December 1987.

This increase was due in part to a doubling of the cigarette excise tax rate from 8 cents to 16 cents in 1983, the first such increase since 1951. Even with the tax hike, however, the tax rate has failed to keep up with the rate of inflation. As shown in table 2, the current tax rate is equal to little more than half the rate in 1967 when adjusted for inflation (U.S. Office on Smoking and Health 1989).

Table 2. Federal excise tax rate on cigarettes (per pack), selected years 1967-88, actual and adjusted for inflation (1967=100)

Year	Adjusted	Actual
1967	.080	.08
1970	.069	.08
1975	.050	.08
1980	.032	.08
1983	.054	.16
1984	.051	.16

Source: See Table 1.

Thus, because a flat tax rate is used, the Federal tax actually is declining steadily, and the 1983 increase does not nearly replace the erosion that has occurred. Even State excise taxes, which have increased almost annually between 1963 and 1987 in current dollars (from an average of more than 4 cents per pack in 1951 to more than 18 cents per pack in 1988) have actually declined in the real tax rate by more than 40 percent in the past 15 years because the rate of increase slowed relative to the rate of inflation after 1972 (U.S. Office on Smoking and Health 1989; see table 2).

Production Policies

Government promotion of the tobacco industry is most clearly illustrated in its production control policies. Ironically, the measures taken at the behest of the industry have restricted supplies in order to maintain prices, a step necessary to guarantee profitability.

Tobacco production first came under Federal regulation in the 1930s, a response to the low agricultural prices of the 1920s (Johnson 1984). Two basic features were involved in what was termed the "tobacco program"—supply control and price support (Pugh 1981). These features have remained in place, although they were substantially modified in 1982. Tobacco supply is controlled by a national marketing quota set by the U.S. Department of Agriculture (USDA). Each year USDA estimates the amount of tobacco that will be sold at a price above the price support level. The quota, which takes effect only if two-thirds of the tobacco growers approve every 3 years, is translated into individual allotments for tobacco farmers. Each farmer is authorized to use a certain percentage of his or her acreage for tobacco production. Subsequent changes have permitted farmers to lease and transfer allotments, leading to more consolidation of tobacco growing, and have switched allotments to a per-pound basis to maximize output per acre (Johnson 1984).

Price supports are put into effect if the supply controls are accepted by the growers. Since 1960 the price levels have been based on an index of inflation rates in overall farm costs (the Parity Index) (Johnson 1984). The support systems go into effect if prices drop below the established price. Stabilization cooperatives buy from the growers at the support price and store the tobacco until it can be resold profitably. The cooperatives, operated by the growers, borrow from the Commodity Credit Corporation, a USDA lending agency. Until 1982 these were nonrecourse loans. If the cooperative lost money, the loans were not repaid; if net gains were realized, they were distributed to the farmers. The Government also provided free tobacco grading services to the growers until 1982.

The tobacco program was reformed in 1982, and again in 1983, in the No Net Cost Program Act, which was designed to transfer the cost of the program back to the growers. One reform was to assess growers for the cost of the grading service and storage; allotments became negotiable separately from the land, all nonfarm (corporate) owners were required to sell their allotments, and the price support formula was modified (Johnson 1984; U.S. Senate 1982; Sumner and Alston 1984). The No Net Cost Program Act proved unworkable because, with the Government's role substantially reduced, the overwhelming burden of sustaining above-market prices over time fell on the farmers. In 1986 the Tobacco Program Improvement Act (Public Law 99-272) was signed into law. It was designed to align supply and demand by lowering guaranteed minimum

prices, selling off the existing stock of tobacco, and adjusting marketing quotas. It reduced the 1986 and future tobacco support prices, provided for the discounted sale of the existing surplus tobacco stocks, made permanent the 16-cent cigarette excise tax, and brought the major cigarette manufacturers into the process for setting quotas. Every year the cigarette manufacturers must provide the Secretary of Agriculture with estimates of their intended tobacco purchases for the following year. These figures are kept confidential by USDA and are used to establish quotas along with recent export levels and reserve stock levels. The cigarette companies are required to buy a minimum of 90 percent of their estimates or pay a penalty, and they are equally assessed with the farmers for contributions to the no-net-cost fund (Warner 1988; Womach 1986).

The tobacco program has been widely criticized on numerous counts. Its most obvious effect has been to guarantee the profitability of tobacco growing (Taylor 1984). Profit per acre for tobacco is $1,198, but only $233 for peanuts and $72 for soybeans (*Congressional Quarterly* 1981). This figure has meant immense profits, the bulk of which goes to the allotment owners (Taylor 1984; World Tobacco 1981). The owners frequently lease their allotments to small farmers, who in turn become dependent on the tobacco income to survive (Christensen 1981). Indeed, the tobacco program has been termed a welfare program for small, impoverished farmers (Higgins and Whitley 1982). The Government has lost hundreds of millions of dollars in this process (U.S. General Accounting Office [GAO] 1982; World Tobacco 1981).

The program has also tended to keep price levels up. Tobacco production costs have been dropping steadily, yet, because of the program, prices have kept up with inflation, even with relative tax levels decreasing. This positive result (from a public health standpoint), however, is overshadowed by the negative impact of the program on society. The primary purpose of the program is to keep the tobacco industry highly profitable and orderly. With the profitability created by the program comes dependence of large portions of American farms on tobacco, political clout in Congress to block public health reforms, concentration of power in a small number of cigarette companies, and huge budgets for marketing tobacco. As discussed later, much more direct policy options exist for maintaining and increasing prices that do not create these adverse consequences. Supply restrictions designed from a public health perspective would have a very different set of regulations.

Tobacco Availability and Youth

Many critics charge that the tobacco industry's marketing practices are aimed heavily at youth. They cite advertising imagery, the use of sports stars and youthful role models in promotions, the placing of ads in magazines and on radio stations with predominantly young audiences, and sponsorships of events designed for young people (e.g., Sobel 1978; Tye 1985; *Smoking and Health*

Reporter 1984). An FTC report quoting an internal marketing study prepared for the tobacco industry appears to substantiate these claims (FTC 1981). The industry denies the charges, and there is considerable debate regarding the impact of various promotional activities on youthful tobacco consumption (e.g., Schudson 1984).

However the debate is resolved, availability trends have clearly facilitated the exploitation of the youth market. Concern about youthful smoking habits began early in this century, when many State laws were passed prohibiting sales to young people (Wagner 1971; U.S. National Commission on Marijuana and Drug Abuse 1972). Most States continue to carry these laws on the books, with minimum ages set mostly between 15 and 18 years of age (U.S. National Commission 1972). However, the increased availability of cigarettes in vending machines as well as in a wide array of retail stores, including those catering to young people, has undermined the intent of these laws and rendered them virtually unenforceable. A recent program in a California county to stop the illegal sale of cigarettes to minors dramatically illustrated the ready availability of tobacco products to young people. Eighteen minors aged 14 to 16 years attempted to purchase cigarettes in 412 stores and from 30 vending machines. They were successful in 74 percent of the stores and 100 percent of the vending machines (Altman et al. 1989).

Cigarettes have thus become readily available to teenagers. This availability is a key component in a total marketing strategy aimed at this population group, as are the low prices that have predominated over the years. The availability has been augmented with free sample promotions at such teenage events as rock concerts.

According to the National Household Survey, teenage smoking is declining—from 29 percent of all 12- to-17-year-olds reporting use in the past year in 1977, to 25.8 percent in 1985, to 22.8 percent in 1988 (NIDA 1986, 1988). There is a disturbing new trend, however, toward smokeless tobacco. The 1985 NIDA National Household Survey reported that 12.9 percent of 12- to-17-year-old males had used smokeless tobacco at least once in the past year. Depending on locality, up to 22 percent of high school males in 1985 used such products daily (Smoking and Health Reporter 1985a). One study of third graders showed that 13 percent of the boys had tried smokeless tobacco (Bailey 1986). The tobacco industry is promoting such use with ad campaigns and tobacco spitting contests. Youth groups are often cosponsors of these events, and free samples are distributed during the course of the contests (Smoking and Health Reporter 1985b). Prizes are divided by age categories, and some contests target children under high school age.

Marijuana

In contrast to policies governing tobacco and alcohol, the Federal Government has never promoted the production or sale of marijuana and has actively sought to deter its use and production. Until recently most controls were aimed at individual consumers, revolving around criminal laws and a rationale of deterrence. More recently control strategies have been redirected to eradicating the importation and production of the drug, with less emphasis on individual consumers. Because of the decision to make the production, sale, and use of marijuana illicit, the availability structure that has developed contrasts sharply with the availability structures for tobacco and alcohol. Marijuana's illicit status has also made scientific study and analysis of its availability structure extremely difficult, if not impossible.

From Legal Use to State and Federal Prohibitions: 1900–37

The cultivation and consumption of marijuana as an intoxicant was introduced to the United States by Mexicans and West Indians; use first appeared along the Mexican border and the Gulf Coast at the turn of the century. Although marijuana grew wild in large tracts of the country and was widely used to make rope and for other agricultural and industrial purposes, there were few reports of its use as an intoxicant before then. During the first part of the century, marijuana was being grown, imported, advertised, and sold without prescription, even by mail order. Although it had limited medical application, if any, pharmaceutical houses manufactured it in herbal, tincture, and extract preparations. Use was apparently very limited during this period.

The first legal control on marijuana use occurred in El Paso, Texas, when a local ordinance banned the sale or possession of marijuana for nonmedicinal use. A complaint from El Paso officials to the Federal Government led to a Federal ban on importation for any nonmedicinal purposes in 1915 under powers vested in the 1906 Pure Food and Drug Act. Statewide prohibitions occurred shortly thereafter in Utah and California in 1915 and quickly spread throughout the western States—laws aimed primarily at Hispanics of Mexican descent. By 1933, 33 States (20 in the West) had prohibitions on marijuana use (Himmelstein 1983).

Several rationales were given for the nonmedicinal bans. Most prominent was a concern that marijuana would become a substitute for opium, cocaine, and alcohol and that to permit its legal distribution would undermine other drug laws (Morgan 1981). Indeed, during this early period marijuana was incorrectly classified as a narcotic in the scientific literature and in statutory provisions (Uelman and Haddox 1985; Bonnie and Whitebread 1974). As with other drugs, marijuana became linked to crime, violence, insanity, poverty, juvenile delinquency, and other social ills, although the scientific evidence to support these

claims was spurious, invalid, or fabricated (U.S. National Commission 1972; Bonnie and Whitebread 1974).

The use of marijuana spread at the same time controls on use proliferated, although it was limited to certain subcultural and ethnic groups. Reports of widespread use and problems, usually appearing during efforts to impose prohibitions, were unsubstantiated. Hispanics, jazz musicians, farm laborers, and other "outsider" groups were the most likely consumers (Morgan 1981; Himmelstein 1983). Despite Government claims to the contrary, there was no evidence of large-scale use by adolescents.

The availability structure was divided into two parts. Marijuana was still available by prescription through pharmaceutical companies, which were permitted to import it (in fact, it remained in the *U.S. Pharmacopeia* until 1942). The companies were apparently never a significant supply source, however. The illicit availability system was apparently largely unorganized and operated on a limited basis through particular subpopulations. Raids were reported on wholesale houses, and arrests involved Hispanics primarily.

It is interesting that many of the State bans on possession and use did not include bans on sale. (A Federal Internal Revenue Service statute that required tax payments for receipts from the production and transfer of "cigarette substitutes" was used in some cases.) Certainly, bans on use have an effect on availability structures of a drug, because sales are but a subset of possession and use. Yet the failure to focus on sales illustrates a more general point: that the early marijuana laws were moralistic and were aimed primarily at stigmatizing and discriminating against particular ethnic subpopulations. Governmental policies toward other illicit drugs—notably opium, heroin, and alcohol during Prohibition—had similar underlying themes and prejudices (Himmelstein 1978).

From Marijuana Recession to Retrenchment: 1937–68

By 1937 every State had banned marijuana use, most often by passing an optional marijuana provision in the Uniform State Narcotic Drug Act (Uelman and Haddox 1985). This national trend can be credited in large part to the Federal Bureau of Narcotics (FBN) of the Department of the Treasury and to its first commissioner, Harry Anslinger. FBN actively sought State prohibitions, helped draft the uniform act, and promoted labeling marijuana as a narcotic, thus equalizing it with other illicit drugs and imposing the same penalties. Several accounts have documented the sensationalism and climate of fear promoted by Anslinger and FBN (e.g., Bonnie and Whitebread 1974; Himmelstein 1978). In 1937 the Marijuana Tax Act was passed, which superimposed a Federal crime on top of separate State criminal statutes. All transfers of marijuana became subject to a prohibitory tax, and all transfers were required

to be registered, thus essentially making the use or sale of marijuana a Federal offense (Himmelstein 1983).

After the Marijuana Tax Act was passed, Anslinger launched a major effort to limit the availability of marijuana by controlling domestic cultivation and aiming enforcement efforts at major traffickers. Those efforts proved to be failures. The war years led to what Bonnie and Whitebread (1974) termed the "Marijuana Recession," with little interest in the Federal programs and little evidence that use of the drug was widespread or on the increase. The eradication program was stymied because of the scope of marijuana growth, the transportability and dormancy of the seeds, and the lack of a highly efficient herbicide. The costs of enforcement were prohibitive, and the eradication program evolved into a reactive effort by FBN, responding to information voluntarily brought to its attention. Indeed, the Federal Government actually encouraged the cultivation of hemp during the war, even though no chemically inactive strain had been discovered (Bonnie and Whitebread 1974). The enforcement effort against major traffickers was also frustrated, according to Bonnie and Whitebread, because the marijuana traffic was highly disorganized, with no national or regional network for the FBN to confront. Commerce was a casual endeavor, not a major enterprise. As a result, FBN had no enforcement function that was not already within State powers.

Interest among policymakers was renewed in the 1950s, and during that decade marijuana became fully integrated into narcotics law and policy. At the time marijuana use was assumed to be a virtually inevitable stepping-stone to the use of harder drugs. This rationale became the basis for increasingly stiff penalties at both the State and Federal levels, despite scientific evidence to the contrary. The fears raised during this period were not reflected in any major changes in either use patterns or availability structure, however. Marijuana remained a drug primarily associated with disadvantaged minority groups, and there is no evidence that there was any organized or sophisticated distribution network (Bonnie and Whitebread 1974).

The explosion in use among young people during the 1960s created major upheavals in both the legal system's reaction to the drug and the availability structure for meeting the demand. Marijuana became a symbol of rebellion on university campuses, closely tied to the societal debate regarding the Vietnam war and civil rights. Between 1965 and 1970, according to both governmental and survey data, use almost quintupled, from between 37,000 and 51,000 kilograms per year to between 1.6 and 2.3 million kilograms per year (U.S. National Commission 1972).

As demand increased, the availability system expanded and a highly profitable business evolved—a major new development in the availability structure, particularly with regard to production. Mexico, which had been the main

supplier to the limited demand before the 1960s, continued in this role throughout the decade, supplying 75 to 90 percent of the marijuana consumed domestically (U.S. National Commission 1972). Cultivation in Jamaica, other Caribbean islands, Colombia, Vietnam, and the United States provided the rest of the market, but none of these sources was significant. The cultivation and importation were much more concentrated, with large quantities involved, as marijuana plantations began to appear in Mexico.

The profitability of the trade was a major factor at all levels of the distribution chain (McGlothlin 1972; U.S. National Commission 1972). Mexican farmers were able to earn far greater incomes from marijuana cultivation than from any other form of labor. Indeed, whole communities became dependent on marijuana as an essential cash crop. Shipment from the farms to the border became highly organized, huge quantities were involved. Once at the border, however, the market was more fragmented because of the bulk of the shipments, the difficulty in storing and smuggling them, and the dangers of detection. Typically, an American contact would be made in Mexico, where the transfer would be made. Relatively small lots, mostly in the 50- to 300-kilogram range, were brought across the border, most frequently by automobile or motor home (U.S. National Commission 1972). Once across the border, the marijuana was quickly distributed in smaller lots to retail dealers. As the trade increased, airplanes and ships were also used, permitting much larger shipments.

Despite the increase in use, the retail trade remained similar to its pre-1960s structure. Mostly small dealers were involved who were frequently users themselves, relying heavily on personal contacts (Atkyns and Hanneman 1974). One survey found that 85 percent of persons using marijuana three or more times per week fell into this category (reported in U.S. National Commission 1972). Full-time retailers also existed, as well as wholesalers, but the retail market remained diffused and not highly organized. Frequently dealers would pool resources for smuggling purposes.

This structure is tied directly to legal policies. Those involved in the smuggling trade were willing to face the potential risks and penalties because of the huge profits involved. The Mexican market was more concentrated, partly because of the lack of adequate enforcement and partly because of the advantages of concentrating at the supply level. As the drug moved through the distribution chain, however, the risks became higher and the advantages of concentration less compelling. The distinction between sellers and users thus remained blurred throughout this period.

Decriminalization, Focus on Cultivation, and Return to Deterrents: 1968 to the Present

The dramatic rise in use during the 1960s and 1970s also had a significant effect on public policies. At first, State and Federal authorities retrenched, holding to traditional rationales for prohibition and imposing harsh penalties for those convicted. As use became more acceptable, however, even outside the bounds of the youth movement, the consensus began to crumble. By 1989, 11 States with one-third of the population had decriminalized possession of small quantities of marijuana (National Organization for the Reform of Marijuana Laws, Washington, DC, office, personal communication, April 1989). Most other States had significantly reduced penalties for use, at least informally through judicial practice (Bonnie and Whitebread 1974). Several governmental reports and noted scholars had urged decriminalization, and several governmental agencies began to deemphasize marijuana use as a social problem. Perhaps most noteworthy was an Alaskan Supreme Court decision in 1975 that made domestic cultivation for private use a protected activity under the State constitution (*Raven* v. *State*).

The impact of decriminalization on use has been debated. Most studies show no or little increase, at least in the short term, although the research has methodological flaws (Smart 1980). Adolescent use has increased, but its relationship to decriminalization is unclear. A lack of impact could have been anticipated, because the deterrence literature (at least regarding drinking-driving offenses) suggests the need for swift, certain penalties (Ross 1982). These factors clearly were not present for marijuana users; violations were widespread, detection was unlikely, and penalties were imposed long after the violation occurred—if at all.

Yet another dramatic shift in policy occurred after 1978. Increased concern about marijuana use by adolescents, the emergence of parent groups as a political force, and the growth of the New Right have all been identified as contributing to the change in social attitude and public policy (Himmelstein 1978) that essentially halted the decriminalization trend. The retrenchment, however, did not result in a return to harsh penalties for individual use. Rather, the focus shifted to controlling the supply of marijuana.

Project Intercept, instituted by the Nixon administration in the late 1960s, was the first major effort to limit supply. At first it focused on smuggling at the border, causing delays and diplomatic controversy without netting significant quantities of contraband. The project became more successful when it obtained cooperation from the Mexican Government. Marijuana farms were systematically raided or sprayed with a pesticide called Paraquat. A major scare resulted in the United States about the safety of sprayed marijuana and led to a depression in the Mexican market. Lupsha (1981) attributed the success of Project Intercept to at least two

factors in Mexican society: the strength and diversity of the Mexican economy (i.e., drug trafficking money was not critical to its health) and a strong central Government with enough authority and legitimacy to make its will felt effectively. He noted that these factors were not present in other Third World countries, making the program difficult to export.

Although Lupsha (1981) called Project Intercept a success, its actual impact is impossible to assess. One study suggests that it did have an impact on supply, use, and price, at least in one community (McGlothlin et al. 1970). On the other hand, Mexico remains a major source of marijuana in the United States, and marijuana-related raids and violence are still reported in the press.

Project Intercept clearly contributed to a major shift in production, from importation to domestic cultivation. This shift had begun by 1970, and by the end of the decade the domestic marijuana industry was flourishing. According to various anthropological sources, the cultivation trend began in rural areas, particularly northern California, among those in the counterculture movement of the 1960s who sought independence and a new lifestyle (Raphael 1985; Chappel 1984). Marijuana cultivation was seen more as a part of that lifestyle than as a business. This view changed rapidly, however, as huge profits were realized. Large marijuana farms began to appear instead of small gardens, and a new, highly potent strain of marijuana called sinsemilla was developed. Marijuana also became an important part of local communities in northern California, which had been in a serious recession since the collapse of the timber industry. Nor was the trend limited to California. Hawaii was another large producer (both crops rating well above $500 million annually). Another 20 States are thought to have crops worth at least $100 million each per year.

The decriminalization trend had led to an official indifference toward the domestic cultivation of marijuana, particularly at local levels. But as social and governmental attitudes changed, there was increased concern that the booming drug economy in rural America would have serious adverse effects on society as a whole. Cultivation spread to Federal lands, heightening the concern of numerous governmental agencies, particularly as reports of violence began to appear (U.S. GAO 1984). The result was the Campaign Against Marijuana Planting (CAMP), a 79-agency effort to eradicate California's marijuana crop. Local, State, and Federal agencies are cooperating in the effort, which is aimed primarily at uprooting the crop rather than at arresting individuals. CAMP expanded dramatically between 1983 and 1985, increasing its budget from $1.9 million in 1984 to $2.9 million in 1988 and expanding its operation from a handful of California counties in 1983 to 41 counties (of a total of 58) in 1988. CAMP is funded primarily by the Drug Enforcement Agency, which has the primary responsibility for Federal drug enforcement. The program relies on aerial spotting and raids from helicopters and is organized as a paramilitary operation. There have been numerous allegations of illegal searches and

seizures, leading to court orders limiting CAMP's tactics (Raphael 1985; Chappel 1984). Because arrests are not the primary goal of the campaign (only 120 people were arrested in 1984), there is little restraint or oversight of police tactics.

CAMP has shown considerable success in reducing supplies. In 1984, more than 1 million pounds of plants and more than 1,600 pounds of dried buds were seized (twice what was seized in 1983). In 1988, 29 percent more plants were eradicated statewide than in 1984. Statewide eradication efforts have had a major impact on grower strategies; there have been fewer large patches, some migration to areas under less surveillance, and a trend to indoor cultivation (CAMP Final Report 1988). CAMP has also added new enforcement tools. A new Federal law now permits seizures of the land where marijuana is grown as part of the criminal proceedings against a grower. Previous forfeiture laws permitted such actions but only as part of separate court proceedings. Officials expect the change of law to create an important deterrent and apparently are considering the use of criminal deterrents against growers in the future (Raphael 1985). Added technology will make observation and spotting easier but will raise additional privacy issues. CAMP officials also see the media as an important ally in publicizing their efforts and increasing the perception that growers will be detected (Raphael 1985).

It is interesting that the changes in cultivation do not appear to have changed the retail availability structure to any great extent. Although systematic studies have not been conducted, the user-seller remains prominent, and full-time retailers and wholesalers are also present. There does not appear to be a centralized system of control by crime syndicates.

During the last half of 1989 a further retrenchment in marijuana policy occurred. President Bush's new war on drugs has refocused attention on marijuana use in addition to marijuana supply. In its National Drug Control Strategy the White House identifies marijuana users as major contributors to illicit drug problems in the United States and calls for punitive measures against them to deter their marijuana use (Office of National Drug Control Policy 1989). As part of this retrenchment, efforts are under way at this writing to overturn the Alaskan Supreme Court decision permitting domestic cultivation for private use. It is too early to assess the impact of the return to a deterrence model for controlling marijuana use.

Marijuana Price Trends

Because marijuana is illegal, there are no reliable price data. Clearly, the drug's illegality has substantially increased its price. Unlike tobacco and alcohol, marijuana is essentially a weed, relatively easy to grow in various climatic conditions; absent legal restraints, its price would be expected to be very low.

(Sinsemilla marijuana is reportedly more labor-intensive to cultivate, however.) McGlothlin (1972) suggested at least three variables that affect price: the size of the transaction, the extent of the risk, and the distance from the border. In his study for the Federal Government, he attempted to estimate costs for various lot sizes, demonstrating that large profits were available from all transactions, particularly at the retail level. His data also suggest that the retailer who sells in small lots makes the largest profits per unit sale. He estimated a kilo price of $250 and a per-ounce price of $20.

The best source of price data following the McGlothlin study is found in market quotations from *High Times* (1989), a magazine targeted to marijuana users and sellers. The magazine periodically (but not systematically) reports prices paid for various types of marijuana, based on readership surveys. In general this source reported only modest increases in prices between 1975 and 1980, but large increases since then. Mexican marijuana of average quality, for example, was reported to be in a price range roughly equivalent to that of the McGlothlin study until the late 1970s, when increases to $45 per ounce were reported. In 1984 the price had risen to between $60 and $80, and in 1989 the range was $120 to $160. The 1988 CAMP report showed sinsemilla prices to be 45 percent higher in 1988 than in 1984. In 1989 Hawaiian and Afghanistan marijuana prices were among the highest—$280 to $375 and $230 to $375 per ounce, respectively. The higher prices reflect, at least in part, the more potent variety of marijuana. Most striking is the lack of cheap alternatives among the many types of marijuana recorded. In 1989 Colombian marijuana, which was reportedly the cheapest in 1985 (in the $50 to $75 range), was selling for $120 to $220 per ounce.

Obviously, these data must be interpreted with extreme caution, given their unreliability. They do suggest, however, that increased availability through domestic cultivation may tend to keep prices down. The large increases at the lower end of the market are particularly significant, because marijuana is the product most likely to be purchased by young people. Marijuana use among young people has declined recently, and studies suggest that their use of other drugs is particularly price sensitive. A possible unintended effect of the increased marijuana enforcement efforts and the subsequent increase in prices is the dramatic increase since 1985 in crack cocaine use, particularly among Black youth in urban areas (NIDA 1986, 1988), which has followed a marked decrease in cocaine prices. Although no studies are available, the increase in crack use in recent years, coupled with the decrease in marijuana use, may be attributable in part to these price trends. Crack, reported to produce an extremely intense high, becomes addictive after a relatively small number of uses and appears to be responsible for serious medical complications ranging from premature labor to sudden death (Cregler 1989; Gawin et al. 1988). The social disruption caused by the crime, violence, and prostitution that are the by-products of the crack epidemic, distressing increases in syphilis and gonorrhea (Centers for Disease

Control 1988) in a population possibly at high risk for AIDS, and the significant numbers of babies being born affected by cocaine (Nobles and Goddard 1989) have created an alarming situation in Black communities. Given these serious adverse effects, the impact of crack, cocaine, and marijuana price trends deserve close study.

Marijuana Use and Availability Among Youth

Miller, in studies of marijuana use among teenagers, found significant increases in use between 1972 and 1977, a period when availability was expanding (reported use in the past month increased from 7 percent to 17 percent during this time). Johnston reported similar increases between 1975 and 1979 among high school seniors. A significant decline in use has followed since that time.

There are simply no data to correlate these trends with changes in availability. It can be presumed that availability increased dramatically among youth as use of marijuana increased in the general population in the late 1960s and early 1970s. The decline in use is concurrent with changing social attitudes and concerns regarding marijuana use, as well as with CAMP. Prices have also apparently increased in this period.

Drug Availability Policy Options

Introduction: Legal or Illicit?

As these historical case studies suggest, drug availability is closely tied to drug use and resulting drug problems. The nature of the relationship is not well researched, however. The best studies have been conducted on alcohol availability. In general, major shifts toward greater or lesser availability have been shown to affect use and problem rates. Perhaps the best example of this phenomenon was Prohibition, when usage and cirrhosis rates declined significantly (Moore and Gerstein 1981). In addition to affecting overall rates of consumption, availability can also dramatically influence how, when, where, and with whom a drug is consumed. Especially in the case of alcohol these circumstances may be highly significant, because driving an automobile so frequently follows consumption. Marijuana consumption has probably been reduced by the relatively limited circumstances in which it can be safely purchased and consumed. Shifts in availability structure may therefore help to reduce the likelihood of unintended adverse consequences, even if overall consumption rates do not decline. These potential impacts also suggest that availability may either further or contradict other prevention strategies aimed more at demand than supply.

In general, drug policy has not been sensitive to these availability relationships. Rather, it has hinged primarily on the illicit-licit distinction, and policy has flowed from that critical decision based on economic or moralistic priorities. Legal production has resulted in availability decisions aimed primarily at the economic betterment of industry, with or without government intervention; illicit production has been met with law enforcement efforts aimed at either users or sellers or both. Each path has led to serious adverse consequences; for alcohol and tobacco, drug use has been actively encouraged, often in high-risk situations. For marijuana, use has been deterred, but the social costs of criminalization have been significantly increased. The shift from user sanctions to producer sanctions can be seen as a positive step, however, because it reduced the emphasis on criminality and put a greater emphasis on availability itself.

In this context, any attempts to legalize an illicit drug should be viewed with extreme caution. There can be little doubt that legalization will greatly expand a drug's availability, and large increases in use and problems can be anticipated. Given the lack of precedent for limiting availability without use of criminal sanctions, the danger is greatly multiplied. Mass marijuana production and marketing by a legal industry could well lead to usage rates comparable to those of alcohol or tobacco.

Criminalization creates enormous costs to society, however, as the prohibition of alcohol demonstrated. Similar problems now exist in the current marijuana market: enforcement is expensive; enforcement resources are strained and only minimally effective; relationships to other countries are complicated; large portions of the population are defined as criminals, including large numbers of teenagers; public lands are a setting for criminal activity; and huge profits are gained in an underground and illegal economy. Criminalization, moreover, relies on the criminal justice system, which is primarily involved in establishing morality standards for individuals and requires strict adherence to constitutional principles of due process and fair trial because of the potentially devastating effects on individuals convicted of violations. Thus, although criminal law provides a basis for moral expression by society, it is a cumbersome mechanism for setting social policy. Regulatory and civil policies are much easier and less costly to administer and carry fewer threats to individual freedoms.

Strict regulation of the availability of a legal drug may thus provide an alternative to criminalization. Although decriminalizing a drug will increase availability, consumption, and problems, appropriate use of civil controls may minimize these consequences, while at the same time eliminating or reducing significantly the adverse costs of criminalization. Balancing the relative social costs becomes a political issue; the goal from a public health perspective is to minimize those costs. A critical need in exploring this territory is a clear delineation of civil policy options and their likely impact on drug use and

problems. These options may include certain ones currently used in controlling illicit drugs, such as forfeitures of property for illegal transactions, and creative uses of governmental tax powers, as have been made in relation to marijuana policy.

Price Controls

Effect of Price on Drug Use

By far the best researched area of drug availability is the impact of price on use. Research on tobacco prices has shown that tobacco usage responds to changes in price. The first major study to look at prices as an important parameter for making public policy decisions was by Lyon and Simon (1968), finding a price elasticity of -.511. That is, if prices were doubled, sales would be reduced by approximately 50 percent (for a discussion of price elasticity, see Russell 1973; Sammuelson 1973). Other studies following Lyon and Simon came to similar conclusions, although the price elasticities varied somewhat (Laughhunn and Lyon 1971; Russell 1973; Warner 1977, 1981a, 1981b, 1984; Lewit and Coate 1982; Lewit et al. 1981; Harris 1982).

Warner, in a series of studies, demonstrated that part of the decline in tobacco consumption that occurred between 1964 and 1972 was attributable to increases in State excise taxes instituted during that period. Lewit and Coate's analysis (1982) took Warner's findings a step further, estimating the price elasticities for subgroups of age and sex. They found that the greatest effect of price was on young people (under 25 years of age), with a price elasticity of -1.4, operating primarily as a means to deter the decision to begin smoking regularly. These findings translate into an estimate that a doubling of the Federal excise tax (from 8 cents to 16 cents, using 1981 prices and tax levels) would lead to a 10-percent decrease in smoking by 20- to 25-year-old males. (Males were also found to be more price sensitive than females.)

Lewit and others (1981) followed up the Lewit and Coate study, looking specifically at teenagers. They found price elasticity for this group to be -1.20 and concluded that a substantial enough increase in cigarette prices would help prevent the formation of the next cohort of smokers. The price elasticities fall with age and are much less dramatic on quantity smoked per day than on the decision to smoke at all.

Harris (1982) and Warner (1984) provided estimates of the impact of the 1983 tax increase from 8 to 16 cents based on data from the study by Lewit and others: Between 1.25 million and 1.5 million adults and between 500,000 and 700,000 teenagers had either stopped smoking or decided not to begin smoking. Warner (1985) compared the impact of a reversion of the Federal excise tax rate to 8 cents (originally scheduled to occur in 1986 but abrogated by Congress in the

Tobacco Program Improvement Act) with increases to 24 cents and 32 cents. The originally scheduled decrease would have increased the number of smokers by nearly 2 million, 464,000 of whom would have been teenagers, and aggregate cigarette consumption would have increased by 20.6 billion cigarettes. Excise tax increases would have had corresponding, opposite effects.

The research was presented at a conference sponsored by the Institute for the Study of Smoking Behavior and Policy (1985) at Harvard's Kennedy School of Government, which brought together leading professionals in the excise tax and cigarette and health fields. The institute reported (p. iii) that the single most important finding reported in the conference proceedings might have been the following: "The greatest impact of cigarette prices, and hence cigarette taxes, on smoking behavior appears to be on the youngest age groups."

In the January 1989 Surgeon General's report (U.S. Office on Smoking and Health 1989, p. 27), the issue of the effect of price on adolescent cigarette consumption was addressed as follows: "Studies demonstrate that increases in the price of cigarettes decrease smoking, particularly by adolescents. It has been estimated that an additional 100,000 or more persons will live to age 65 as a result of the price increases induced by the 1983 doubling of the Federal excise tax on cigarettes."

Research on the impact of price on alcohol consumption shows similar results, although most studies suffered serious methodological flaws that made their estimates unreliable (Ornstein 1980; Cook 1981). Work by Cook (1981, 1984) provided important new evidence, finding significant price elasticities for distilled spirits. Cook's major innovation was to study the effects of tax increases directly on various alcohol-related problems—cirrhosis of the liver, auto crashes, and heavy drinking. On all three measures he found that relatively modest increases in State excise taxes (25 cents or more per proof gallon) would lessen the incidence of these problems; alcohol-impaired driving would be affected the least, but still significantly. Grossman and others (1987), paralleling the studies on tobacco prices and youth, found that young people are the most sensitive to alcohol price increases. Levy and Sheflin (1983) estimated a single demand equation for all alcoholic beverages and found that a price increase of 2.5 percent would reduce per capita consumption by 1 percent. Research on the impact of alcohol prices and tax policies remains largely uncharted, however. Cross elasticities between beverages have not been accurately determined, nor has the impact of income (but see Levy and Sheflin 1983).

One study of price elasticity of marijuana has been conducted (Nisbet and Vakil 1972). The researchers concluded (p. 475) that "the individual college student's demand curve for marijuana exhibits the standard characteristics

prescribed by conventional economic theory," with price elasticities ranging from -.40 to -1.51.

Policy Implications

These studies taken together suggest that price policies are a critical tool in diminishing drug use and drug-related problems, particularly among youth. Federal and State governments can most directly affect prices through tax policies, but only if the drug is a legal product. Yet in the past, tax policies governing tobacco and alcohol have been based exclusively on economic concerns, without attention to health implications. A fundamental shift in the rationale of and basis for tax policies related to drugs is therefore needed. For legal drugs, taxes should ideally be set at levels that maximize their deterrent effect without creating incentives for an illicit market. For alcohol and tobacco—given recent price trends, relatively low prices, and large industry profits—tax increases could well be substantial before this danger arises, although accurate estimates are impossible without further research. Further research should include study of possible substitution of other drugs for products that are taxed. Such increases will also increase revenue, more accurately reflecting the cost of drug use on society.

Prices can also be affected indirectly by production controls (see the following section). Clearly, making marijuana illegal has resulted in artificially high prices, although the adverse effects of an underground economy and large profits to an illegal industry have also occurred. A first step in developing a price strategy, then, is to increase taxes substantially on legal drugs and then study carefully the impact on illicit production. As more knowledge is gained, tax policies may provide an important tool for controlling other drugs.

Production Controls

Research has not been conducted on the impact of production controls on drug consumption and drug-related problems. Production controls for legal drugs have been based almost entirely on furthering industry expansion and profitability. Those government controls that do exist concern primarily product quality, tax collections, and illicit production. Health concerns have played only a minor role in the development of most of these agendas. Marijuana policies in recent years have focused on production control in an attempt to limit use, but research on the impact of the policies is extremely difficult because of the drug's illicit status. As a result, available reports are based primarily on limited case studies, self-reports of limited populations, and news accounts (e.g., Raphael 1985; Chappel 1984; Staats 1978; McGlothlin et al. 1970; cf. Smart 1976).

The lack of research severely hampers the development of policy in this area. Several principles can be delineated, however, in order to evaluate current

policies and suggest directions for action. Any change in production controls should include carefully designed evaluation studies to determine impact on retail structure and availability, price, consumption, and related problems.

Many production controls actually fuel supply—e.g., tax shelters for grapegrowing, tax incentives for Puerto Rican and Virgin Islands rum, government support for product research, and subsidies and price supports for tobacco-growing and grading. Encouraging production is in turn likely to promote consumption. The status of the international wine industry illustrates this point: because of government support for winegrowing in Europe, there is a worldwide wine glut, termed a "wine lake" in European Common Market countries. This glut has resulted in aggressive marketing campaigns (notably for imports from Italy to the United States), low prices, and major efforts to increase retail availability. European exports have gained a major share of the U.S. market. Wine coolers (the newest entry in the wine product line), designed to compete with soft drinks, may be a result in part of the oversupply of wine.

The oversupply situation suggests a first principle of developing production controls: that governments should regulate production so that it responds to rather than encourages demand. The Tobacco Program Improvement Act provides a mechanism for doing so, issuing allotments to farmers and setting ceilings on production for each year. The ceiling should be based on an evaluation of demand to ensure that supplies are limited, but not so limited as to encourage illicit production.

A second principle for developing production controls is the need to lessen the immense profitability of the legal drug trade. Alcohol and tobacco have a very high rate of return at all levels of production and sale. Tax and other fiscal policies can help to reverse this trend. Instead of providing tax shelters, for example, special taxes can be imposed when land is changed to alcohol or tobacco production. Instead or in addition, competing crops (e.g., soybeans and fruits) can be given special protection through tax incentives or subsidies, thus lessening the differential for farmers between drug crops and other crops. Special attention should be given to encouraging nonalcoholic beverage production. Excise tax policies, it should be noted, can complement these strategies designed to reduce profitability.

Third, policies should actively deter illicit production, because as production controls are put in place the potential for financial gain becomes greater. Marijuana policies offer good examples for approaching this issue. Forfeiture of lands and materials used in illicit production and importation, sophisticated surveillance, and heavy tax penalties as well as deterrence strategies may all be in order. Because financial gain is usually the primary goal of illicit producers, approaches that adversely affect the financial equation may be particularly appropriate. The focus should also be on large rather than small

producers and importers, because the former have a far greater impact on total availability.

Finally, production policies should favor smaller enterprises over larger ones. Total marketing requires large marketing budgets that are beyond the capacity of local and regional firms. Total marketing not only floods society with advertising and other promotions; it also relies on widespread availability and relatively low prices. The concentration of power also results in increased political power of the industry at national levels and reduces responsiveness at local levels. Thus, appropriate antitrust measures, differential tax rates, and other mechanisms to encourage local production may all be appropriate drug production policies. It is interesting that marijuana policy has precisely this effect by focusing deterrence measures on large growers.

As with excise tax policy, a careful evaluation will be necessary to determine optimal levels of production controls so that availability is limited, but not so severely as to promote widespread illicit production. This new direction in public policy should be developed with caution and experimentation. Despite the uncertainty, current policy toward alcohol and tobacco—which promotes production and increases profitability—is clearly in need of reevaluation.

Controls on Retail Availability

Like production variables, retail drug availability has not been a major topic of public policy research. Evaluations of tobacco availability are apparently nonexistent; marijuana research, in part because of the difficulty of obtaining accurate data, counts only a handful of studies. Bell (1983, 1984) has studied marijuana availability based on respondents' knowledge of sources for purchase. However, his work has not focused on the impact of availability so much as on using the availability data to determine more accurately what segments of the population are at high risk. Both Bell (1983) and Staats (1978) pointed out that retail availability is a necessary precursor to use and that major restrictions on availability reduce consumption. McGlothlin's study (1970) of consumption during Project Intercept suggested that use declines when availability is curtailed, but it raised an additional point: the possibility of drug substitution. This issue was reiterated by Smart (1977), and further study is clearly warranted.

Alcohol availability has been studied more systematically, although the research remains fragmented. Changes in laws controlling minimum legal drinking age (MLDA) have been the most carefully studied, using time-series research designs that provide a model for other availability studies (e.g., Wagenaar 1983; Wechsler 1980; Douglass et al. 1974). In general, the research has demonstrated a strong link between this type of availability control and alcohol-related crashes among the target population. When the MLDA is lowered, crash rates among all young adults and teenagers increase; when it is

raised, crash rates among these same groups drop. The effect of the MLDA on youthful consumption rates is less conclusive, although an impact on beer consumption has been reported in many studies (Smart 1977b; Smart and Finley 1976; Wagenaar 1982). The research has provided a basis for increasing the MLDA throughout the United States.

Other research is less definitive. Changes in hours of sales may affect the time when drinking arrests for drunkenness and alcohol-related crashes take place, but no study has shown conclusively that such changes alter the per capita rate of consumption (Smith 1983). Price promotions (such as happy hours) appear to increase consumption (actually a subset of the price research—see Babor et al. 1978, 1980). The aggregate number of retail off-premises outlets appears to be associated with increased consumption, although that is apparently not the case for on-premises outlets (Moore and Gerstein 1981; Smith 1983). Hoadley and others (1984) showed that relatively strict control policies are associated with lower consumption and problem levels. Finally, studies of sudden changes in availability show subsequent changes in use and problem indicators.

Research in this area must be approached with caution. Availability variables interact with other societal and cultural factors in a dynamic process, with no clear cause-and-effect relationship. Thus, availability shapes both drug consumption practices and social norms and vice versa. Neither should be considered in isolation. Retail availability policies are important for another reason: they provide an opportunity for community involvement in determining appropriate levels of availability (Wittman and Hilton 1987). This aspect of retail policies is important because the process of setting community availability standards not only helps shape consumption patterns but also can increase community awareness and commitment to prevention.

Several areas for policy development in drug retail availability can be delineated, based primarily on experience and research in the alcohol field. First, licensing regulations and community zoning and planning ordinances provide a basis for determining the location and number of drug outlets. Although research is limited on the relative merits of differing numbers and locations of outlets, this area is a promising one for future development. In the case of alcohol, particular attention can be placed on developing a licensing scheme that minimizes the chances of drinking and driving, because 50 percent of all alcohol-impaired driving incidents originate from licensed establishments (O'Donnell 1985). (The sale of tobacco currently requires no licensing whatever.)

Second, the types of licenses and the practices of those serving the drug can be regulated. Some establishments may actively encourage heavy drug use through inappropriate business practices. Responsible practices can be required as a condition of doing business, and sales at certain types of outlets (e.g.,

gasoline stations and convenience stores) can be prohibited. Special care can be given to minimize impulse purchases of drugs. For tobacco, limiting or eliminating vending machine sales is suggested. For alcohol, sales to minors and intoxicated persons are prohibited in all States (sales of tobacco to young people are also restricted). Mandated server training can be instituted to promote adherence to these laws.

Third, places for use can be regulated. Regulations on tobacco consumption in workplaces, airplanes, and public premises provide interesting case studies, although no research on their impact is available.

Further, tax policies can be used as an adjunct to these licensing and zoning strategies. For example, tax incentives can be given to establishments conducting server training, and special taxes can be assessed on businesses that create high risks of intoxication or drinking and driving. Deterrence policies directed at sellers, particularly those threatening the use of the license to sell, may also be appropriate.

Taken together, this set of regulatory policies has been labeled "server intervention" in the alcohol field and has received increasing attention in recent years (Mosher 1983; Colman et al. 1985). Oregon recently enacted a mandatory server training bill, and several private and public organizations have developed server and manager training programs (Mosher 1987). Increased attention to a variety of management policies (e.g., happy hours, sales of alcoholic beverages at gas stations) have come under closer scrutiny at local and State levels. Dram shop liability (see the next section) has helped to promote this new approach to alcohol sales and service.

Server intervention programs may provide a model for the sale of other types of legal drugs, although the nature of the drug and the problems associated with its use clearly affect the approach used. A concerted research and policy effort is needed before the full potential of this policy can be known.

Civil Liability

An additional strategy for limiting drug availability involves the potential civil liability of drug producers and retailers for harm caused to third parties. Civil liability measures can apply to both the legal and illicit drug trade and can provide a powerful tool for altering dangerous industry practices.

Civil liability can apply to a number of business practices. Current lawsuits against the tobacco industry involve an alleged failure to warn consumers of the inherent dangers of the product (Tye 1985). The presumed remedy is labeling that provides sufficient health-related warnings. In certain circumstances, a product can be found to be "inherently dangerous" (Roth 1985). In such cases, resulting damage can be assessed against the producer without regard to

industry warnings. It is unclear to what extent, if any, the "inherent danger" doctrine applies to drug trafficking, although the greater the potency and dangers associated with a given drug, the greater the likelihood that it can be found to be inherently dangerous.

Product impurities and imperfect designs leading to harm to users or innocent third parties can also offer a basis for liability. Many residential fires, for example, are ignited by smoldering cigarettes. There is increasing evidence that alternative designs would limit smoldering and virtually eliminate this hazard (Garner 1985). The tobacco industry's failure to correct the design defect may thus provide a basis for a civil liability action by a person injured in a cigarette-ignited fire.

By far the most common type of civil liability action related to drug use is the "dram shop" case, which rests on negligent business practices at the retail level. Commercial servers of alcoholic beverages in 37 States have been held liable for injuries caused off the premises by their intoxicated or underage patrons (Mosher 1985; Colman et al. 1985).

The claims can be founded on either statutory provisions or common law provisions, focusing on the negligence of the server in providing alcohol to someone known to be a danger to the public as a result of consuming the alcohol served. Large judgments are frequently involved in these cases, and the circumstances in which liability has been imposed have expanded greatly in recent years (Mosher 1985; Colman et al. 1985; Harrington 1986).

Dram shop laws provide an important tool for encouraging responsible business practices among licensees. Unfortunately, most current legal approaches have minimized the prevention potential of these cases by not focusing on the business practices issue (see Mosher 1979, 1985, and Colman et al. 1985 for discussion). Recent events, notably the drafting of a Model Dram Shop Act (Prevention Research Group 1985; Mosher and Colman 1986), may signal new policy directions.

Conclusion

Drug availability policy offers an important opportunity for those interested in preventing drug-related problems. The contrast of illicit and legal drug policies highlights the lack of attention paid to availability issues in the past. This inattention has resulted, in the case of tobacco and alcohol, in governmental policies and business practices that actively encourage drug use and that have created an environment hostile to other prevention and recovery-treatment efforts. It has also led to a situation in which there are few alternatives to

criminalization for illicit drugs despite the unintended adverse social consequences of drug prohibitions.

A public health approach to availability policies provides a basis for delineating new policy options. As presented in this chapter, these options are relevant primarily to legal nonmedical drugs. They can serve to reduce drug consumption and prevent drug-related problems, particularly among youth, without instituting prohibitionary bans. Societal use is accepted as a given, but policies can be shaped to encourage abstinence and to actively discourage problematic consumption. Clearly, the extent to which these options are used and their appropriateness to a given drug depend on numerous factors, including the potency and potential dangers of the drug in question, social norms and expectations regarding use of the drug, and patterns of use.

Because past availability policies for legal drugs have rested primarily on economic concerns, their potential health benefits have not been studied. Thus, caution and careful research will be needed as they are given more of a public health focus and applied to different substances. Particular attention should be placed on their impact on youth, among whom drug problems are severe and for whom society is now attempting to establish an abstinence norm for all drug use. The potential for enhancing other prevention and recovery-treatment efforts and for improving the health of Americans, particularly youth, provides an adequate incentive for embarking on the journey.

Note

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EPILOGUE

Creating Drug-Free Environments: Beyond and Back to the Individual

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At its core this volume examines the possibility that characteristics of our culture facilitate and possibly encourage the decision by some to try drugs. In such an environment the threshold between acceptable and unacceptable ways to reduce discomfort and "pursue happiness" through the use of chemicals may be crossed almost without notice. Explicit messages about avoiding drugs and limiting alcohol consumption can be easily overlooked or ignored in the face of other messages that offer both licit and illicit pleasure, relief from pain, and even the realization of cherished dreams.

This monograph analyzes such contradictions systematically and offers some hope of resolving them. One of the monograph's premises is that contradictions between public policy and social norms, between private enterprise and the common good, frequently occur as a natural by-product of an evolving, dynamic society like ours, rather than resulting from bad judgment or malevolence. Contradictions are almost unavoidable when a society attempts to deal with complex and controversial issues. Acceptance of that premise prepares one to hear what this monograph has to say about the need to examine the environment in which health-related policies and norms are translated into widespread practice and behavior.

The Nature of a "Social Problem"

Important questions about the nature of social problems permeate the various explorations of our Nation's past and current responses to AOD use in this monograph. One key question is: what defines the issue as a *social* problem? A closely related question is: in what sense is it a social *problem*?

Reference to AOD use as a social problem suggests that AOD use affects people both individually and in relation to one other. It indicates that substance use is problematic because it conflicts with cultural expectations—many of which, in turn, conflict with one other. AOD use by some members of society

presents an actual or potential source of difficulty for a substantial number of other members. Solutions to the problem can—or may—reduce the conflict between individual behavior and societal norms.

Given these meanings of "social," in what sense is AOD a social problem? In his provocative essay, "The Nature of Problem Solving in Social Action," Sarason (1978) distinguished between social and physical or mechanical problems. Once solved, physical or mechanical problems (e.g., designing a bridge or placing a space vehicle in orbit) tend to remain solved. A bridge provides a means of going from one side of the river to the other, and that solution works as long as the bridge remains standing. The solution can be used for other rivers and other crossings.

In contrast, social problems may not be permanently solvable. Poverty, for example, as defined by the relative availability of economic resources, has always existed. Increases in the economic resources of the lower income segments of society (through increases in the minimum wage or negative tax plans, for example) do not permanently eliminate all differences in access to economic resources. Similarly, educational disadvantages may be overcome temporarily through such interventions as Head Start, yet, as educational standards change in response to students' enhanced abilities, the performance of some will again lag behind that of others.

These examples illustrate the notion that social problems are the inevitable consequences of cultural structures and human diversity. Such problems are always with us in one form or another, and solutions last only until the problem recurs in another form. In a sense, social bridges cannot be permanent; the river banks are continually shifting.

Alcohol and Other Drug Use as a Social Problem

The AOD problems our society faces today clearly illustrate Sarason's point. Concern about the individual and social costs of drug use is long-standing. Throughout history societies have struggled to define what forms of drug use are acceptable or unacceptable. Responding to official attempts to limit access to chemical substances, the resourcefulness of human beings in finding ways to reduce distress or achieve satisfaction through chemicals has been remarkable. It has ranged from the distillation, heating, and burning of a variety of plants and other natural substances to the more recent widespread manufacture of synthetic substances. Patterns of use have been similarly creative. Drinking, smoking, eating, chewing, sniffing, injecting—all have been tried at one time or another. Throughout history people have used chemicals nonmedically and encountered difficulties in doing so. As President George Bush stated in one of

his early pronouncements on the administration's campaign against drug use, the problem is multifaceted and complex; there are no quick fixes.

It is reasonable to assume that, regardless of the possible solutions to the problem, AOD misuse will remain a part of the human condition. Recognizing this assumption does not mean we have no obligation to look for solutions. It does, however, require us to recognize the limitations we face. Instead of seeking one single solution to the drug problem, we have a task that is more intricate and in some ways more challenging.

First, we must monitor how AOD use occurs across subgroups and at particular times and places. Doing so will give us insight into the nature of the problem. Second, we must design ways to minimize the negative consequences of substance use and reduce the levels of use. To accomplish either, society must define which consequences are most important to avoid and how to do so acceptably. One of the main points of this volume is that an essential ingredient for success is the creation of an environment in which substance use, regardless of the form it takes, is defined clearly and consistently as unacceptable.

Analyzing the Environment for Prevention: The Chapters Revisited

A repeated theme of this volume is that elements of our society and culture contribute indirectly to developing and maintaining AOD problems.

Lawrence Wallack and Kitty Corbett set the stage by reviewing the recent history of AOD abuse prevention efforts and concluding that a broad-based, comprehensive approach is needed. The emphasis of the majority of prevention programs on attempting to change the behavior of individuals misses the point, they imply. For one reason, research has consistently shown that individual-oriented programs, whether they teach information or social competencies, have little effect on people's behavior. In addition, not to include many different agents of socialization, in addition to schools (traditionally the main forum for drug abuse prevention), is to overlook rich opportunities for prevention. The stage must be broadened and the proscenium heightened, Wallack and Corbett contend, or we will only continue to repeat the mistakes of the past.

The Wallack and Corbett chapter leads logically to Todd Gitlin's astute observations about the nature of our society and culture in implicitly encouraging a wide range of behavior related to drug use, if not drug use itself. As Gitlin explains it, drug use is a predictable consequence of our culture's emphasis on consumerism, immediate sensation and gratification, and unlimited access to the "good life." Television has intensified and speeded up the life-imitates-art cycle Gitlin describes, and often it is difficult to know who the hero is—the man

with the badge or the success figure with the flashy car (who may also be a drug dealer).

George Gerbner's exhaustive study of the interplay between the media's depiction of chemical use and the commercial interests so closely aligned with the very survival of the mass media make it clear why we cannot expect this situation to change significantly in the foreseeable future. His examination of the history and current status of regulatory controls and media presentations of alcohol, tobacco, and other legal drugs embellishes in fascinating detail the basic, all-pervasive contradictions in the messages our society presents about AODs—to young and old alike.

Gerbner's chapter underscores a dilemma that is central to discussions of environmental approaches to prevention: the perpetuation of prodrug messages in the mass media is buttressed by our Nation's commitment to the principles of free speech, free enterprise, and free choice. With the possible exception of the constantly growing antitobacco sentiment of recent decades, it cannot be surprising that neither Government nor industry has had the will or determination to hold public health and safety more valuable than free speech and free enterprise. Yet again (one can conclude from reading Gerbner's chapter) our society is profoundly ambivalent about how to control substance abuse, and that ambivalence permeates the environment in which we raise our children and live our lives.

James Mosher approaches the monograph's central theme from a distinctly different point of view. He focuses on an aspect of the environment, the availability of chemical substances, that is clearly open to various kinds of regulation and control—which, in turn, can have a measurable impact on substance use. As Mosher explains it, the antidote to "total marketing" of chemical substances—an emphasis on the four key variables of promotion, product, price, and place—is "total prevention."

Applying the Principles

This monograph suggests a set of principles for consideration by all who are interested in the prevention of AOD use—among them policymakers, community leaders, citizens, and concerned parents. These principles draw on the central premise that by reducing the contradictions between the social and political environment of chemical use on the one hand and essential public health goals on the other, we will create a world in which messages about the need to avoid AOD use are communicated explicitly and consistently.

A first principle is to accept the reality presented in this monograph that contradictions between public policy and public health do exist and in many

cases are acute, i.e., the social and cultural environment surrounding AOD use can be decidedly harmful. A second principle is to focus prevention efforts increasingly on public policy and issues affecting the availability of legal drugs. Finally, the AOD abuse prevention field—ranging from policymakers to prevention workers interacting directly with parents and youth—must develop an agenda for specific actions to take. Many such actions are implied or suggested throughout this monograph; others can be extrapolated from it. An important first step is to raise the general awareness about the nature of the problem, namely, that it encompasses far more than just illegal drugs. Professionals in the AOD abuse field have known this for a long time, but public awareness lags far behind.

Toward Healthy Environments

One could offer a long list of reasons why changes in the attitudes of our society toward AOD use are desirable. The avoidance of unacceptably high economic, health, and social costs would be prominent on that list. So would the many real or perceived conflicts of interest among those who produce tobacco, alcohol, and other legal drugs and those who are responsible for protecting the public health. The ambiguous and ambivalent role of the media would be an item as well. In an ideal world each item on the list would be dealt with thoroughly and systematically, in a highly public way, as part of a carefully thought-out action agenda for AOD abuse prevention. But would anyone want to live in such a world? What would it be like?

It is probable that engineers can design the technology to prohibit operation of a car unless the driver has full control of his or her physical and mental capacities. Biochemists can probably develop tests to determine precise AOD levels in an individual's body. Employers can establish and enforce strict drug-related guidelines for hiring and retaining workers. Legislators can pass, and the police and courts enforce, laws that would make it far more difficult to sell or even use drugs. Thus we can agree—perhaps—that we want a society free of drugs, and we can empower various groups to keep us from going astray.

But is that the answer? Would the resulting limitations of individual freedoms, the constant intrusion on daily life, and the unending sense of vigilance be acceptable or effective? Recalling Sarason's (1978) observation about the nature of social problems, would even this level of external control achieve the desired effect? Sarason would argue that people will inevitably find new ways to reduce pain or achieve pleasure and that some of these would be unacceptable to others and have their own social and health costs.

An alternative approach is to accept that profound environmental changes depend on the attitudes and desires of the citizens who make up a society. The environment will change if citizens wi it to change. With regard to drugs, this

change entails a scrupulously honest look at whether we are truly committed to an environment that is drug free. If so, direct and honest ways of resolving the contradictions described in this monograph are urgently needed.

If we make such a commitment, the image of a war on drugs will no longer suffice. A more accurate picture might be that of a demanding journey across uncharted territory. Some of the journey will be a rewarding adventure, some of it a disappointment. Those who begin that journey and agree to set out for the kind of destination suggested by this volume—a social, cultural, and policy environment that actively and consistently discourages substance use—will at least be heading in a new and promising direction.

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